NEBRASKA INFORMATION TECHNOLOGY COMMISSION
Tuesday, June 10, 2003, 1:00 p.m.
Videoconference Sites:
Executive Building-Videoconference Room 103, 521 South 14th Street, Lincoln, Nebraska
Panhandle Station-High Plains Room, 4502 Avenue I, Scottsbluff, Nebraska
Kearney Public Library-Information Center, 2nd Floor, 2020 1st Avenue, Kearney, Nebraska
State Office Building, Room 207 (2nd Floor), 1313 Farnam Street, Omaha, Nebraska

AGENDA

Meeting Documents:
Click the links in the agenda
or click here for all documents (3 MB)

1:00 p.m.   Call to order and Roll Call - Lt. Governor Heineman
Notice of Meeting
Approval of **March 24, 2003 Minutes***
Public Comment
Presentation to Brenda Decker (Recipient, Government Technology Magazine Award)

1:15 p.m.   Update on Major Initiatives

    A. *Telecommunications Infrastructure*

        1. NETCOM/CAP - Brenda Decker
[Pursuant to Neb. Rev. Stat. § 84-1410, the NITC may enter closed session to receive a briefing on "Convergent Transport Backbone Network Services" RFP (SCA-0262), currently under review by the Division of Communications.]
        2. Statewide Telehealth Network - Anne Byers
        3. Statewide Synchronous Video Network - Tom Rolfes

    B. *Community and Economic Development*

        1. Technologies Across Nebraska Survey Results - Anne Byers
        2. Status Report on Mini-planning Grants - Anne Byers

    C. *Delivery of Government and Educational Services*

        1. E-government Strategy - Rick Becker
        2. Annual E-Government Conference (Nov. 18) Co-sponsorship - Steve Schafer
        3. E-Learning Initiative - Jean Jones and Jim Zemke

    D. *Planning and Accountability*

        1. Security Initiatives - Steve Schafer

2:15 p.m.   **Statewide Technology Plan ***

        Complete Plan
         - or by section -
        Section 1 - Introduction
        Section 2 - Goals
        Section 3 - Action Plan
        Section 4 - Effectiveness Measures

    A. Review of changes to previous version (2002)
    B. Discussion - Does the draft update reflect the NITC's goals and priorities?
    C. Request for approval

2:45 p.m.   Other Reports from the Councils, Technical Panel and Staff

    A. Community Council Report - Anne Byers
    B. Education Council Report - Tom Rolfes
         - **New Members***
    C. State Government Council Report - Steve Schafer
    D. Technical Panel Report
    E. Staff Report
         - E-Government Survey Options - Rick Becker
         - Update on use of E-mail Systems - Rick Becker
         - I.T. Expenditures - Steve Schafer

3:15 p.m.   Other Business

3:30 p.m.   Next Meeting Date - September 30th, 1:00 p.m., location to be determined.
Adjournment

(Bolded * indicate Action Items.)

Meeting notice was posted to the NITC and Public Calendar Websites on May 27, 2003.
Agenda and meeting materials were posted to the NITC website on June 3, 2003.

Nebraska Information Technology Commission
Monday, March 24, 2003, 9:00 A.M.
Peter Kiewit Conference Center Room 127
1313 Farnam Street
Omaha, Nebraska

PROPOSED MINUTES

MEMBERS PRESENT:

Lieutenant Governor Dave Heineman, Chair
Greg Adams, Mayor, City of York
Linda Aerni, Chief Executive Officer, Community Internet Systems
L. Merill Bryan, Senior Vice President & Chief Information Officer, Union Pacific
Dr. Eric Brown, Manager, KRVN Radio
Trev Peterson, Attorney, Knudsen, Berkheimer, Richardson, and Endacott, LLP
Dr. L. Dennis Smith, President, University of Nebraska
Hod Kosman, CEO, Platte Valley Financial Services

MEMBER ABSENT: Dr. Doug Christensen, Commissioner, Department of Education

CALL TO ORDER, ROLL CALL AND NOTICE OF MEETING

Lieutenant Governor Heineman called the meeting to order at 9:12 a.m. There were seven commissioners present at the time of roll call. A quorum existed to conduct official business. The meeting notice was posted to the NITC and Public Meeting Calendar Web sites on March 5, 2003; the meeting agenda was posted to the NITC Web site on March 12, 2003.

APPROVAL OF NOVEMBER 13, 2002, MINUTS

Commissioner Peterson moved to approve the minutes. Commissioner Brown seconded the motion. Roll call vote: Adams-Yes, Aerni-Yes, Brown-Yes, Bryan-Yes, Heineman-Yes, Kosman-Yes, Peterson-Yes. Results: 7-Yes, 0-No. The motion carried.

PUBLIC COMMENT - There was no public comment.

REPORT – COMMUNITY COUNCIL
Anne Byers, Community Information Technology Manager
(Click on above Report-Community Council link for detailed report information.)

Ms. Byers reported on the Community IT Planning and Mini Grant program. The mini grants have already contributed to several significant developments. For example, the Crawford/Harrison group has conducted a community technology survey and completed an engineering study. This information was used to prepare an application for the RUS Community Connect Broadband Grant Program. The West Point group is working with two providers to deploy fixed broadband wireless in West Point, Oakland, and Bancroft/Pender. The group is planning to use their mini grant for an engineering study.

Although the $2,500 grants are small, they have proven effective in being a catalyst for progress.   None of the 18 communities that applied for but did not receive grants have proceeded on their own, even though they could have had access to the same technical assistance from the State.

Commissioner Smith joined the meeting at 9:21 a.m.

Commissioners discussed the Community Council's nominations for membership. Discussion centered on the need to insure "new blood", geographic distribution, and representation of Western Nebraska. Ms. Byers explained that five of the nominations are new to the Council, and that only a few of the original members are still on the Council. With the new members, Western Nebraska has three representatives.

Commissioner Aerni moved to approve the slate of nominations. Commissioner Kosman seconded the motion. Roll call vote: Adams-Yes, Aerni-Yes, Brown-Yes, Bryan-Yes, Heineman-Yes, Kosman-Yes, Peterson-Yes, Smith-Yes. Results: 8-Yes, 0-No. The motion carried.

Ms. Byers asked for approval of the proposed grant from the Community Technology Fund to continue a second round of mini grants for community IT planning. Mr. Schafer explained that staff is recommending that the NITC target grant funds to projects selected by the Council, rather than conducting a competitive process for awarding multiple projects. This departure from past practice is necessary because with budget cuts and uncertain revenues there is not enough money to make a competitive process worthwhile. Money for the proposed $20,000 award for another round of mini-grants is available, because a previous grant recipient recently surrendered its allocation of $25,000. Mr. Schafer noted that staff has been vigilant in recapturing funding from stalled projects for both the Community Technology Fund and Government Technology Collaboration Fund.

Mr. Brown moved to approve the award of $20,000 from the Community Technology Fund for the community IT planning mini grants. Mr. Bryan seconded the motion. Roll call vote: Adams-Yes, Aerni-Yes, Brown-Yes, Bryan-Yes, Heineman-Yes, Kosman-Yes, Peterson-Yes, Smith-Yes. Results: 8-Yes, 0-No. The motion carried.

REPORT – EDUCATION COUNCIL
Tom Rolfes, Education Information Technology Manager
(Click on above Report-Education Council link for detailed report information.)

Mr. Rolfes presented highlights from the written report. Using a grant from the State Records Board to the CIO, the Education Council partnered with Nebrask@ Online to develop the Nebraska Education Portal (www.nebraska.gov/education/). The Education Council prioritized several options for enhancements that will be added to the portal in the future. On March 18, the Public Service Commission held a workshop on the current status and future of distance education in Nebraska. The Technical Panel helped to organize testimony and made a presentation. One outcome was awareness and interest among commissioners in the efforts of the Statewide Synchronous Video Workgroup to develop a long-range implementation plan. The workgroup will meet for the first time on March 26.

Mr. Rolfes reported on the 3-21-03 meeting of the Education Council. Many members of the Council expressed frustration that they had not made more progress toward achieving their goals. Their concerns fall into three areas: 1) The Council lacks any funding or real authority to enact change. Some members suggested the need for a grant fund modeled after the Community Technology Fund and the Government Technology Collaboration Fund. 2) The Education Council expected that the biennial budget review process would help projects that achieved a high ranking. Instead, identifying projects and putting them through the process actually seemed to be a detriment in terms of funding from the Legislature. 3) The Education Council is impatient with the slow progress in developing a statewide education network and the lack of any real funding commitment from the state. Every other state with a statewide education network started out with a substantial amount of seed money. The NITC should perform the role of advocate.

Discussion indicated general agreement with the Education Council's concerns. One purpose of today's meeting is to examine whether the NITC has the right tools to achieve its goals.

REPORT–STATE GOVERNMENT COUNCIL
Steve Schafer, Chief Information Officer
(Click on above Report-State Government Council link for detailed report information.)

Mr. Schafer referred to the E-Government Strategic Plan (2003), which is an element of the Statewide Technology Plan. The update of the plan serves a dual purpose. One is to set guide the efforts of state agencies. The other is to set expectations and provide a benchmark for choosing a manager for Nebrask@ Online. Discussion indicated an interest in conducting a survey to determine what services citizens expect to do over the Internet. The Commission will revisit the 2003 E-Government Strategy when it updates the Statewide Technology Plan.

REPORT–TECHNICAL PANEL
Steve Schafer, Chief Information Officer
(Click on above Report-Technical Panel link for detailed report information.)

Mr. Schafer explained some of the history of the Public Safety Wireless Project. Some funding is coming from the Information Technology Infrastructure Fund, which requires NITC approval of the project plan before any expenditure. The project plan under consideration pertains to the proposed expenditure of $265,000 for expert assistance and some administrative expenses. Pursuant to statute, the Technical Panel has reviewed the project plan and recommended approval, subject to the condition of providing a list of deliverables and milestones. Commissioner Heineman provided further information on the formation and recent activities of the State Communications Alliance of Nebraska (SCAN) Board.

Mr. Kosman moved to approve the project plan for expending up to $265,000 for consultant and administrative expenses as described in the project proposal for the Public Safety Wireless Project. Mr. Peterson seconded the motion. Roll call vote: Adams-Yes, Aerni-Yes, Brown-Yes, Bryan-Yes, Heineman-Yes, Kosman-Yes, Peterson-Yes, Smith-Yes. Results: 8-Yes, 0-No. The motion carried.

Mr. Schafer introduced the proposed guideline for "Use of Fax Servers." The purpose of the guideline is to give official recognition to a solution that is now in place for sending and receiving electronic faxes directly from one's personal computer and e-mail system. The system was developed in response to a need from the Department of Health and Human Services, but it was implemented in a manner that will allow other agencies to use the system as well. Commissioner Bryan asked whether there was any potential to aggregate demand and achieve greater economies of scale. Mr. Schafer offered to investigate this further and provide more information at the next meeting.

STAFF REPORT
Steve Schafer, Chief Information Officer

Mr. Schafer referred to the report, "Action Items Update", which summarizes progress on the NITC Councils' priorities. There were no questions. He explained that statute requires an annual update to the Statewide Technology Plan. The NITC has the option of doing a major overhaul of the plan or making minor revisions. The timeframe for minor changes to the content and action items could be accomplished by the June meeting. Major changes would require a longer period of time. Today's discussion of vision, goals and effectiveness will help determine whether a major revision is necessary.

FUTURE MEETING DATES

Commissioners agreed to the following calendar of meetings for 2003:
- Tuesday, June 10
- Tuesday, September 16
- Thursday, November 13

The September meeting is subject to change, because not all of the commissioners would be able to attend. Commissioner Heineman directed Mr. Schafer to try to find an alternate date. The June meeting will be in Kearney.

PANEL DISCUSSION – "SETTING STRATEGIC DIRECTION FOR INFORMATION TECHNOLOGY"

Commissioner Heineman thanked Commissioner Bryan for organizing the panel discussion. He thanked the panelists for spending time and sharing their insights with the NITC. Panelists included: Charley Eisele and Merill Bryan of Union Pacific, Ken Gerhardt – ConAgra, Jim Hansen – Mutual of Omaha, and Jim Schmidt of First National Bank. Discussion included the following questions and answers:

Q: How does one achieve buy-in when going from a decentralized model to centralized support?
- Sometimes a command decision is necessary;
- Try for consensus among the "willing";
- Set a standards and get some participation to prove benefits;
- Provide centralized funding to gain participation;
- Provide a corporate level solution with corporate funding to get participation;
- For infrastructure, start with a subsidy to build the infrastructure, then charge out costs when it is fully developed;
- Security is driving more centralization;
- Focus on common problems;

Q: How does one assess the risk of choosing the wrong project or the wrong technology?
- The NITC can provide information and research to guide decisions;
- Conduct due diligence to understand the viability of vendors regarding the choice of technology partners.

Q: What authority should the NITC have over technology decisions?
- The biggest challenge is understanding and amalgamating needs that may be common across different entities – "build once and use many times"
- The NITC's authority is similar to companies in the private sector with decentralized corporate structure.
- Success in any environment requires the use of marketing concepts, because no CIO has a mandate from the CEO for every project. Ninety percent of the CIO's task is marketing their ideas. Credibility is essential.

Q: Should public entities outsource their information technology functions?
- For large organizations, outsourcing to companies within the United States should not be cheaper. It if is, then one is not doing one's job. For smaller companies there may be situations involving

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special skills or economy of scale. Offshore solutions may provide cost savings for "commodity "tasks like programming.
- Packaged solutions are an option.
- One must never outsourcing activities that are fundamental or critical to core competencies.

Q: How does the private sector get rid of low priority functions?
- Getting organizations to give up the entitlement mentality is difficult. The book, "Good to Great: Why Some Companies Make the Leap... and Others Don't" by Jim Collins, has excellent advice on this topic.
- It is necessary to stop funding things that are not strategic.
- View infrastructure as a commodity or utility to remove emotion and then drive costs down.
- Look for ways to share resources by identifying a broad portfolio of opportunities and then choose some that offer immediate benefits.
- Find out the priorities of participants and address them.
- Decide what is critical to one's core competencies and then treat everything else as a commodity.
- Take the emotionalism out of budget decisions by focusing on one's priorities.
- Get back to core competencies.
- State government with multiple systems has a huge opportunity to achieve greater efficiency.
- Distinguish between commodity-type functions and core competencies.

Q: How does one take competition into account?
- Use benchmarks.
- Use benchmarks and look at best practices in competing companies.

Q: How important is standardization and centralization?
- It took our company five years to consolidate data centers, networks, and other common functions. We focused on distinguishing between commodity functions vs. core competencies.
- Standardization can occur over time. Pick one's battles and focus on small gains.
- We have saved a lot of money by consolidating computers, networks, and help desk functions.
- E-mail is the single most important application at (company A).
- E-mail is the largest application at (company B).

Q: The state should host a high-level economic summit to determine the state's priorities.

LUNCH (12:20pm to 1:00pm)

DISCUSSION: VISION, GOALS, and EFFECTIVENESS MEASURES

The meeting reconvened at 1:00pm. Discussion covered a wide range of issues. Specific ideas for further consideration included:
- The goals and vision of the NITC are still valid.
- Prepare an inventory of current spending on information technology;
- Conduct a Nebraska-specific survey to follow up on the Digital State Survey and determine what citizens and businesses consider to be the highest priority for e-government services;
- Direct the NITC Councils to address two questions: 1) What do we need to do to achieve strategic goals, and 2) what do we need to do to be more efficient?

- Establish better communication with the Governor and Legislature, especially pertaining to prioritization of projects and the role of the NITC in setting strategic direction for information technology in the state.
- Commissioners should become more involved in the NITC Councils, perhaps by attending Council meetings.

NEXT MEETING AND ADJOURNMENT

The next meeting of the NITC will be June 10 in Kearney. Staff will arrange for a meeting location and finalize the time.

The meeting was adjourned at 2:08 p.m.

Minutes were taken by Steve Schafer and reviewed by staff of the Office of the CIO/NITC.

BEFORE THE NEBRASKA PUBLIC SERVICE COMMISSION

In the Matter of the Nebraska Public   )
Service Commission, on its Own   )
Motion Seeking to Establish a   )   Application No. NUSF-26
Long-Term Universal Service Funding   )
Mechanism   )

Plan for Support of Rural Hospital Health Care Providers

On December 17, 2002, the Nebraska Public Service Commission (Commission) entered Progression Order Number 3. Progression Order Number 3 found it in the public's interest to allocate a portion of monies from the Nebraska Universal Service Fund (NUSF) to promote affordable telecommunications access for rural hospitals to larger health care facilities. The Commission found that an allocation of support for this purpose would have a positive impact on affordability of rates. The Commission found that monetary support for advanced telecommunications services will pass through communities, will promote quality health care in rural Nebraska communities, and benefit rural Nebraska communities overall.

The Commission requires that a grant of NUSF support be supplemental and secondary to the receipt of Federal Universal Service Fund (FUSF) support, grants and other available monetary sources. The rural hospitals must demonstrate that they are first availing themselves of any accessible federal support and grant monies. The Commission found rural health care facilities should be responsible for picking up a reasonable portion of their costs for connectivity as well.

The Commission directed the NUSF Department, all NETCs and the Nebraska Hospital Association (NHA) to work to develop a specific plan or plans for support approval not to exceed $900,000 per calendar year. This does not preclude any other telecommunications provider from participating and seeking a designation of a NETC. The Nebraska Hospital Association has worked with the NUSF Department to clarify issues and has worked with all interested hospitals, NETCs, the Nebraska Information Technology Commission (NITC) and the Telehealth Subcommittee of the NITC Community Counsel.

The Commission directed the Nebraska Hospital Association to bring a specific plan or plans before the Commission for initial approval on or before June 1, 2003. In accordance with this direction the attached proposed plan is submitted. If the Commission finds it appropriate and necessary to seek additional information concerning this plan, the Nebraska Hospital Association requests a permissible process to provide such additional information.

Plan for a Statewide Nebraska Telehealth Network

May 23, 2003

Executive Summary

The participating hospitals and health care providers associated with the Nebraska Hospital Association are working together to unify and expand the use of telehealth and telemedicine networks for the delivery of the highest quality medical care to all of the citizens of Nebraska. Nebraska telehealth and telemedicine networks have been in use for over 10 years and have become part of the delivery of care provided by physicians located in rural communities. These networks allow rural health care providers to collaborate with specialists located in regional centers to diagnose and make faster decisions as to the course of treatment that a patient should receive. These networks also allow patients to do follow-up visits with specialists, sometimes hundreds of miles away, without leaving their local community. The ability to "see" the specialist locally encourages patients to complete and follow a course of treatment without having to miss days of work or incur out-of-pocket expenses associated with travel.

Over the years, multiple telehealth and telemedicine networks have been built throughout the state to serve rural areas, with most of these networks serving logical geographic territories that follow existing physician referral patterns. Because of unique specialty services at different regional centers, many of the rural hospitals belong to more than one telehealth network. The need to connect to more than one telehealth network has caused many rural hospitals to install multiple telecommunications facilities to connect to various regional centers. These telecommunications facilities are typically costing thousands of dollars per year in monthly service fees. While some of the costs for these fees are offset by grants, the grant funds are typically time-limited and may not be a sustainable way of funding these vital networks.

If sustainable funding is not found for these network facilities, many rural hospitals will not be able to continue to offer telemedicine or telehealth services to their patients. Rural health care providers are struggling financially as a result of changes in reimbursement policies and rising costs in general. The need to find a sustainable means of funding telecommunications costs for telehealth purposes is becoming even more critical in the rural communities across the state. Without sustainable funding to offset telecommunications costs, many of the under-served communities will be forced to withdraw from participating in these vital telemedicine and telehealth programs.

The hospitals throughout Nebraska have come to understand it is imperative that they cooperate whenever possible to deliver the highest quality care to patients, no matter where they are located. A statewide telehealth network, one that links current networks and offers low cost participation to health care providers, would allow providers the means to improve care while holding down costs. Such a network would allow medical centers of excellence to be made available to all Nebraskans, not just those who live near these centers.

The Nebraska Hospital Association is actively involved in creating a consolidated collaborative telehealth/telemedicine approach for statewide adoption. A major component of this effort is the unifying of the telehealth/telemedicine networks. This network will allow all hospitals to interconnect with each other while also maintaining the current telehealth/telemedicine relationships used to treat their patients. A statewide network will offer Nebraskans, patients and medical professionals, wider access to specialized health care services, as well as providing new and timely ways for clinical training and education to be delivered to rural hospital personnel and patients.

Such a network would also offer further savings by reducing the cost of communications facilities by "re-homing" the lines to reduce mileage costs charged for high bandwidth telecommunications facilities required for telehealth applications. Since telecommunications lines are billed on a mileage basis, re-homing can reduce the mileage costs by connecting the rural hospital to the closest regional center. This is accomplished by installing a "network backbone" that would interconnect regional centers and would allow for "passive switching" of telehealth connections. This approach would not only optimize mileage costs, in many cases it would eliminate the need for more than one telecommunications facility since a single access line would be able to access multiple centers. Utilizing Internet Protocol (IP) switching and addressing technology can accomplish this approach. **(Please note, the telehealth network would not have access to the public Internet, or be used for non-health care purposes. IP switching is a technology that allows packet data connections to be used to transmit multiple forms of data over a common network.)**

What is required to make this proposal a reality is approval from the Nebraska PSC to allow Nebraska Universal Service Funds (NUSF) to be used, along with Federal Universal Service Funds (FUSF) where they apply, to reduce the cost of the common network backbone and end point circuits. The use of the NUSF to offset the cost of a common backbone is well within the intended use of the fund. The economies offered by re-homing telecommunications facilities and the reduction in access lines to several hospitals would offset the cost of funding the common backbone.

The initial funding requirements have been targeted at $900,000 per year. These funds would be used to:

1. Further reduce the cost of telecommunications lines to $200/month/line.
2. Fund and operate a backbone network to interconnect the existing health care networks, thereby reducing the number of direct lines and reducing the health care telecommunications costs in Nebraska.

The NUSF, along with the Federal USF, would allow rural hospitals to pay a reasonable monthly service fee, estimated at $200 per month, to certificated service providers to deliver the necessary bandwidth to connect to the statewide network. An additional fee of approximately $50 per month would also be paid by the rural hospitals to help support the common backbone facilities that would interconnect the regional centers around the state.

The use of the NUSF to offset the ongoing monthly expense for telecommunications services is critical to the successful implementation of the statewide network. A more reasonable cost would allow continued use of the networks, which in turn would allow the citizens of rural Nebraska to have access to the best health care services the state has to offer.

The following background and implementation plan is provided to show how the NHA members plan to establish a common statewide network. The statewide network would accommodate all rural health care providers allowing them to take advantage of the network. It would also permit large hospitals in urban areas to connect to and participate as well.

Once approval is received, the NHA and participating health care providers will begin executing the appropriate tasks to implement the network using a phase-in approach. Detailed project plans will be developed and all compliance issues will be addressed. A project manager will be assigned who will have overall responsibility for the implementation process and will provide status reports as required. The goal of this plan is to implement the 4 phases within 18 months upon receiving approval.

Background

Nebraska hospitals, both rural and urban, have been leaders in the use of telehealth and telemedicine networks as a means of providing for the wellness of the citizens of Nebraska for many years. Many rural hospitals have connections to collaborating hospitals through dedicated telecommunications networks that provide access to specialists and services not offered locally, or to provide for more immediate consultation for patients and doctors to assist in critical treatment decisions. Rural patients who would have to drive sometimes hundreds of miles to see a specialist now, routinely schedule follow-up appointments for check-ups and treatment modifications from their local community hospital, often with their personal physician participating in the consultation.

Having convenient access encourages patients to follow-up with specialists because they do not have to miss a day of work or travel hundreds of miles for a 20-minute follow-up appointment. This in turn has reduced the number of re-admits to hospitals, and occasionally saves a life. Several of the Nebraska telemedicine networks have been in operation for over 7 years and have become a critical part of the health care delivery for many under-served rural communities.

> **"This technology has the potential to improve access to health services ofor all Nebraskans," said Gov. Johanns. "Telehealth can bridge the barriers of distance to improve economic opportunities and access to health care, especially in rural areas."** - July 13, Governor Johanns

The use of telemedicine has proven so valuable that many rural hospitals will often be part of more than one telemedicine network. For example, rural communities such as Benkelman, Ord, Broken Bow, Gothenburg and Imperial belong to two telehealth networks serviced by two regional centers of excellence, Good Samaritan Health Systems in Kearney and Great Plains Regional Medical Center in North Platte. The centers provide different services and currently require two network connections. Funding for the network connections most often is provided by

short-term grants, which typically are offered on a twelve-month basis with no guarantee of renewal.

Since citizens and local physicians have come to depend on telemedicine and have incorporated it into local health care delivery, it is important to maintain these vital links. However, rural hospitals in particular are struggling with budget cuts and losses of revenue because of changes in Medicare reimbursement, along with other rising operational costs. Since grant dollars will frequently not be offered for more than 2 or 3 years, it is important that reliable sources of funding be found to offset the monthly expense for maintaining the telemedicine connections.

> **Convenience is an obvious reason why patients like telemedicine. In a survey done by Good Samaritan Health Systems, 23 percent said they believe the quality of care was actually better than they would get in a face-to-face visit; 77 percent said it was the same. And nearly all of them said they'd recommend telemedicine to friends and family** – Good Samaritan Telemedicine Patient Survey Results

The Nebraska Universal Service Fund and the Federal Universal Service Fund are two sources of reliable funding to help sustain telehealth/telemedicine networks. In addition, the Nebraska Hospital Association has worked with its participating members to evaluate and propose a statewide telehealth network (Nebraska Telehealth Network – NTN). This common network would maintain the telemedicine and telehealth services currently provided, and at the same time look at newer technology to lower monthly telecommunications operating costs and increase the reach of telehealth to more Nebraskans. At the same time, the NHA members are looking to use the proposed telehealth network to reduce operating costs in other areas and improve health care delivery services through the use of a statewide telehealth network.

Purpose of a Statewide Telehealth Network

The purpose of a statewide network is to lower operating costs while improving access and expanding telehealth/telemedicine services to participating health care providers. By looking at the overall networking needs of health care providers throughout Nebraska, there are opportunities to offer a more efficient and cost effective network that would maintain, or in several instances, expand collaborative services while reducing annual operating cost.

As mentioned earlier, many rural hospitals are participating in multiple networks. These network connections often times use different technologies and are served by centers in different geographic locations. The use of a more efficient common network would allow hospitals to consolidate to a single network connection that would offer a reduction in monthly operating costs, and would allow access or connection to any hospital or medical center in the state on the network. What is required is a common backbone that would interconnect existing networks and provide for passive switching.
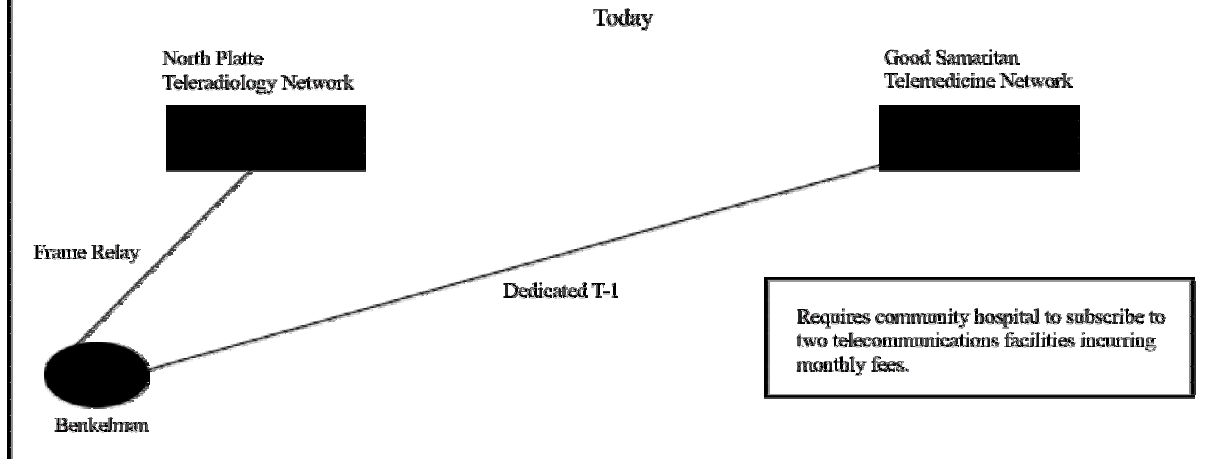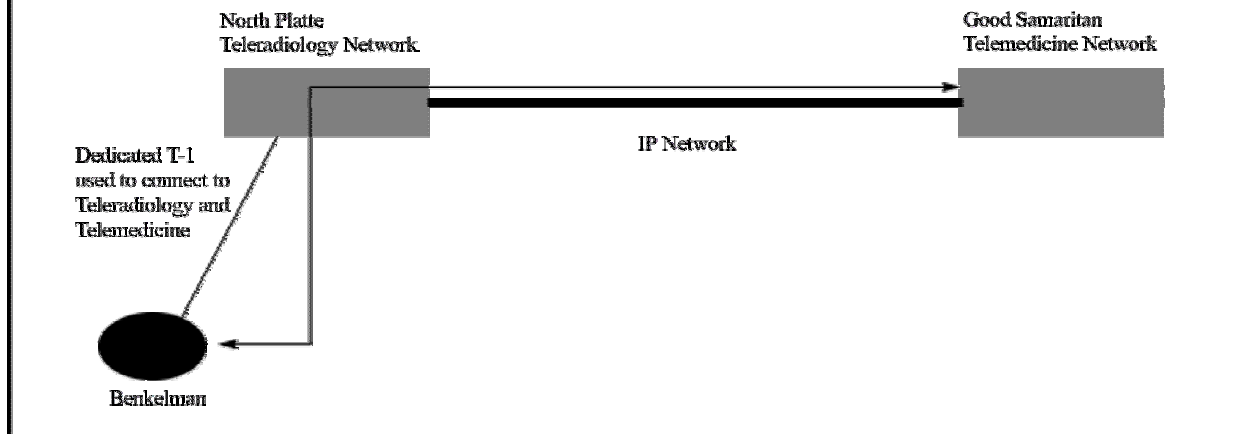
Several hospitals are using more than one regional center for different services. The example above is reflecting a rural hospital connected to two regional centers using two mileage based network facilities that result in two monthly fees.

The above reflects the use of switching to allow one network facility to have access to two different regional centers, "passive switching". Using a common backbone, the rural hospital will have only one monthly network facility fee.

The NHA member hospitals have committed to participating in a common Nebraska telehealth network and are planning to work together with a common goal of providing interoperability and connectivity, along with sharing resources. The objective is to have a statewide "utility" that will permit hospitals to easily connect with agreed to standards based customer premise equipment (CPE), and at a low monthly cost that in the case of rural hospitals would be subsidized by the Federal and Nebraska Universal Service Funds.

The proposed network would be TCP/IP (or IP for short) based, which would permit virtually all existing networks to operate with only minor changes to existing CPE technologies. An IP network would provide/support video, voice, telemetry and text to any participating hospital in the state. In order to provide for the necessary services, bandwidth of over 1 Megabit Per Second (Mps) is required and would typically be served by a T1 (1.544 Mps) connection. The T1 service is made up of a local connection (a local loop) from the rural hospital to the local service provider. There is then a mileage charge (dollars per airline mile) to connect to the collaborating hospital community, and then another local loop to the collaborating hospital itself. The monthly cost for a T1 facility will depend upon the number of miles between the rural hospital and collaborating hospital; and depending on distance, the monthly cost can be several thousand dollars a month in a rural situation.

Monthly Mileage Billing
Cost Elements

For a Typical Point to Point T1 Facility
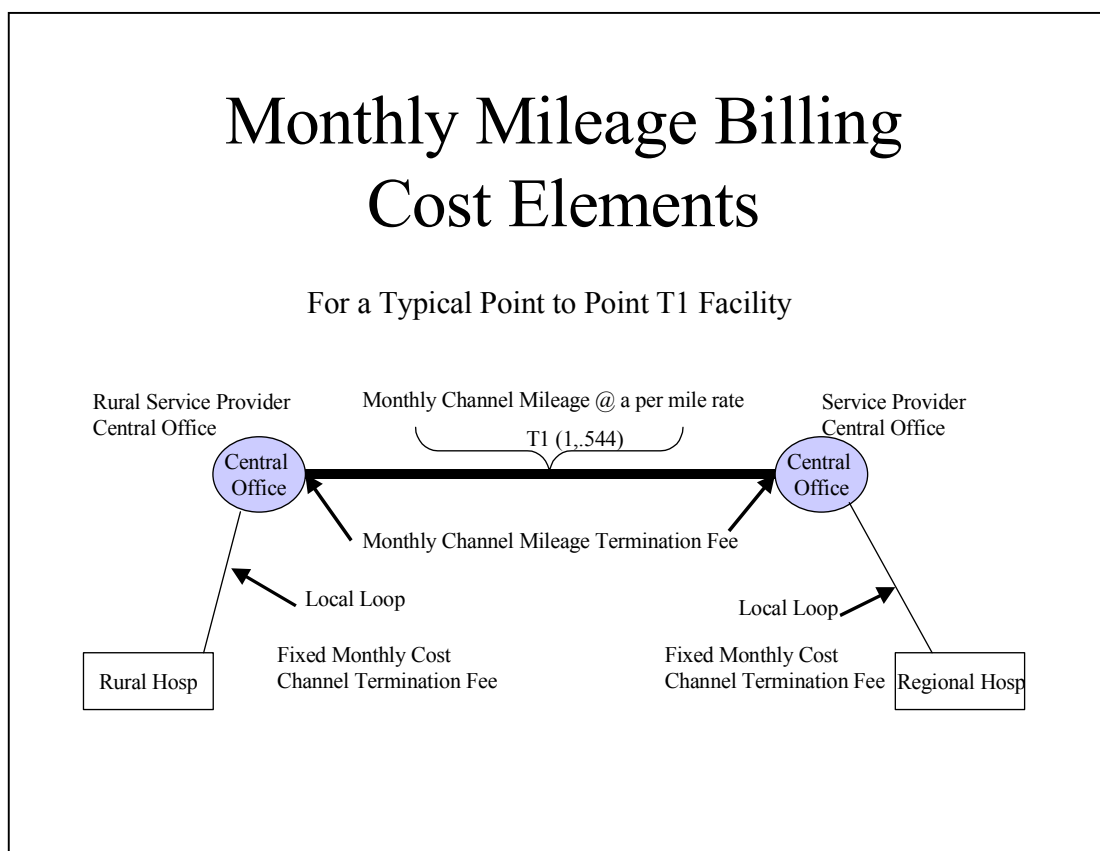
The above represents a typical mileage billing for a T1 broadband network facility. The facility requires monthly channel terminations and mileage channel terminations, as well as a per mile charge between points.

In contrast, a hospital in an urban area will pay substantially less than a hospital in a rural area for a connection between two locations in the metro area, typically costing only several hundred dollars a month versus several thousands of dollars. The cost discrepancy is due to the availability of broadband facilities and the cost to provide short-haul verses long-haul (mileage) network facilities.

A key success factor to such a common network is to make it affordable to operate on a monthly basis. The use of the Federal and Nebraska Universal Service Funds will lower the costs of connecting to the statewide network. The objective is to have each hospital within the state pay approximately $200 per month for a T1 service line connected to the Nebraska Telehealth Network. Additionally, the participating hospitals will contribute a monthly fee of $50 to the support of the common backbone required to interconnect existing networks.

Design Approach

Using the NHA as a forum, the participating hospitals have worked with a consulting group to develop a technical design for a common network. Existing health care networks and relationships will be maintained, and in several instances expanded. Recognizing that several hospitals have already purchased equipment or have undergone an evaluation process, it is not the intent to begin the process anew. The design allows for existing equipment to co-exist with future equipment in a TCP/IP network. For equipment that is not inherently IP based, converters are available to bridge the non-IP equipment into the IP network. This equipment is readily available and cost efficient when compared to replacing in-place equipment. The design approach is to:

1) Allow existing networks to get relief from telecommunications transport charges as quickly as possible.
2) Allow networks being considered to deploy rapidly with supported funding for telecommunications charges.
3) Provide guidance for IP bridging where needed.
4) Design the statewide backbone.
5) Issue an RFP for the backbone along with support and advanced services.
6) Deploy the backbone connecting the various hubs that exist or are being developed.

The design effort will begin by taking the existing networks and configuring them into an optimized common network that will offer a single network access, but offer connectivity to virtually any participating hospital that wishes to collaborate within the state.

Common applications will be agreed upon, and standard approaches that offer clinically accurate and technically supportable systems will be developed. These applications will be standards based and utilize commercially available products that offer low maintenance costs and easy operation.

Bandwidth requirements will be developed based on existing and planned use. Existing usage will be a basis for traffic analysis; however, since the network will offer more connectivity, it is anticipated that added usage will be generated because of available access to more collaborating hospitals and medical institutions.

Interoperability testing will be done to ensure that current investments in CPE technologies can be protected wherever possible. The use of standards will also simplify the training associated with the use of the network, again with an eye on efficiency and consistency. This will also offer some economies for maintenance, as well as providing a reasonable budget for day-to-day operation.

HIPAA security and privacy assessments will be done. While the network is passive in nature it will be important for participating hospitals to understand how patient confidentiality needs to be maintained when using the Nebraska Telehealth Network. Recommendations will be made to each participating hospital as to what steps need to be incorporated when patient consults are done, and patient information is required.

Beyond HIPAA, the network will be developed with security incorporated. The NTN will have the necessary security technologies to protect hospitals and patients from unauthorized access and usage.

Service provider selection will be done in a competitive and open bid. Selection of the service provider(s) will be done in accordance with state and federal guidelines to ensure that USF requirements are met. Utilization of existing state telecommunications networks where practical, will be considered as a way of holding down costs, assuming arrangements can be made that will assure compliance with NUSF guidelines and intent. The final decision as to the service provider(s) selected will be based on the following criteria: reliability, cost, standards supported, technology supported, value added services provided, logistical support, availability and sustainability.

Technical Network Design Considerations

Design Goals

The Nebraska Telehealth Network (NTN) has the following design goals:

1) Reduce the number and need of multiple home run lines between larger health care facilities and the rural health care sites.
2) Reduce the effort required to interconnect a diverse set of sites and equipment.
3) Facilitate the timely exchange of health care information through a variety of technologies including, but not limited to, video conferencing, teleradiology, telepsychiatry, continuing medical/nursing education and bio-threat information.
4) Provide HIPAA compliant security where applicable through the network.
5) Operate in a standards based mode.
6) Provide a consistent network management interface for problem resolution, traffic management and capacity planning.

Design Issues

The design of the Nebraska Telehealth Network exists at a high level. While some of the details are known, others will be resolved when the RFP is issued. It is a flexible design that focuses on value, efficiency and effectiveness.

Design issues must consider:

- Most cost effective use of communications lines;
- Standards based computing to facilitate interconnection and data transfer;
- Security; and
- Support and maintenance.

Most cost effective use of communications lines – A study of existing lines shows the existence of lines that could be eliminated by use of a backbone. A backbone would serve to interconnect existing networks and minimize the number of "home run" lines that currently exist or are planned. Reducing the number of lines that are eligible for Federal and State USF reduces costs associated with network, support and maintenance. Our study indicates that even after implementing the backbone lines, there would be a net reduction of over 10 T1 lines. The backbone would interconnect seven (7) key locations, which represent the largest networks or best concentration points for remote critical access hospitals.

Standards based computing to facilitate interconnection and data transfer – Standards provide the means by which sites, with various types of equipment, may communicate and exchange data. The purpose of the NTN is not to dictate or specify what equipment may be attached to the network. The NTN will specify a variety of standards that the sites must use in order to communicate with other sites. The over-arching standard will be TCP/IP. The NTN is designed as a TCP/IP transport. This provides the greatest flexibility in terms of equipment and applications that can make use of the NTN.

Security – Recognizing that health care data is highly sensitive, the network will operate in a dedicated address space. Firewalls at the seven node locations will verify that the traffic may enter the node. Network Address Translation protocols will allow only specific addresses to be visible outside a facility. Encryption may also be implemented as required (i.e., continuing education content may not require the same level of security/encryption as radiology).

Support and maintenance – Recognizing that the telecommunications skill set of the NTN users will vary greatly, it is proposed that the providers of the backbone also provide a one-call support facility. This facility would be available to all NTN users to assist in problem resolution and trouble escalation. This is viewed as critical since a point-to-point communication on the NTN may (and usually will) require communications through a number of carriers. To aid problem resolution, a central point to resolve problems and coordinate among the different carriers would improve network availability. Furthermore, since the backbone does not "belong" to a single user, a central point is in a much better position to perform traffic analysis and

network utilization. Monitoring this information is key to having a backbone free from congestion and with maximum availability.

Alternatives Considered

1) *Dark Fiber* – Use of the Dark Fiber network for the backbone was considered. While it provides a number of very interesting and powerful capabilities at this time, the quoted cost was higher than other alternatives.

2) *State Network* – The State network (NETCOM) provided many benefits for consideration as a backbone provider. NETCOM has an extensive coverage of the state, is able to provide a 24/7 support desk and network monitoring, offers some interesting options for dealing with peak bandwidth requirements, and has a very attractive price for lines acquired under the state contract. After consultation with Nebraska PSC staff, we found difficulties in reimbursing NETCOM for services, as they are not a certified carrier; however, an alternative billing arrangement is under investigation. NETCOM lines would not be eligible for Federal USF funds, as they would not be acquired through the RFP process.

3) *Pure Telco* – A Pure Telco carrier approach was considered. This approach provides extensive coverage of the state, would qualify for Federal and State USF. This option was also the most expensive in that it required the most support from Federal and State USF.

Proposed Network

As mentioned earlier, a number of health care networks currently exist in Nebraska. These networks, with hubs in North Platte, Kearney, Grand Island, Lincoln and Omaha utilize a variety of network providers. The network providers include NETCOM, Certificated Telco Providers and Dark Fiber.

The NTN seeks to deploy a high-speed data backbone to interconnect existing networks. By interconnecting the existing networks, costs are reduced as the number of "home run" lines are reduced or eliminated. A study of the existing (and planned) lines indicates that there are over 20 lines that terminate in remote locations with more than one line. The backbone will eliminate the need for the multiple terminations by allowing traffic to use the common backbone to a concentration site (existing telehealth network), which has a direct connection to the rural site. Using our earlier example, there are currently two lines to Benkelman. There is currently one circuit from North Platte and one from Kearney. These lines allow both North Platte and Kearney to communicate with Benkelman. Both lines are eligible for Federal USF support. A backbone between Kearney and North Platte (see earlier examples of passive switching) eliminates the need for one of the "home run" lines. The selection of the line between Benkelman and North Platte or Kearney would be decided on which line had the lower cost. If the lowest cost were between North Platte and Benkelman, Kearney would connect to Benkelman through North Platte. There are many other similar examples in the current networks. In fact, a statewide backbone is proposed that would require ten (10) T1 lines. These 10 T1 lines

would replace 21 existing duplicate/redundant T1 lines. This translates to 11 T1 lines no longer requiring Federal or State USF support.
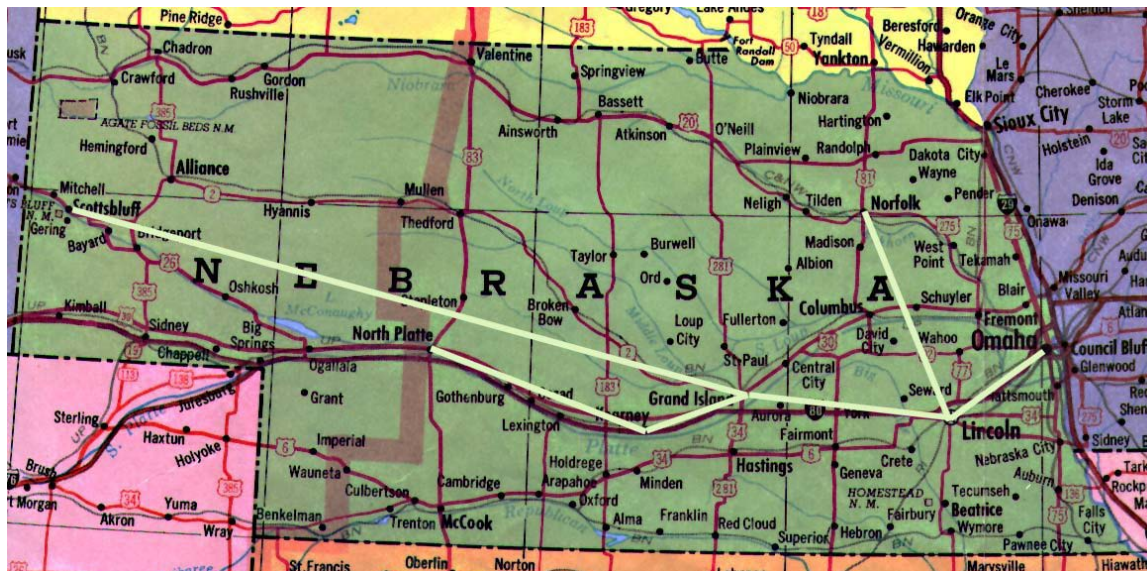
The backbone, as well as all traffic on the network, will be standards based. The key standard, upon which others will be built, is TCP/IP. Video conferencing standards would be H.323, which includes (Audio: G.723, G.722; Video: H263, H261; Data: T.120; Control: H.225, H.245). Other standards for teleradiology are being investigated. Digital Image Communication In Medicine (DICOM) is a standard for image communication in the medical field that is supported by most vendors of digital imaging devices (CT, MR, digital X-Ray, etc). Currently DICOM files can be transferred over TCP/IP networks without impact.

There are currently seven nodes or concentration points planned for the NHN. These points are Scottsbluff, North Platte, Kearney, Grand Island, Lincoln, Norfolk and Omaha. Many of the critical access hospitals (CAHs) are already connected to these seven nodes. CAHs that have no connection will connect to the node that has the lowest cost associated with the connection. The interconnection of the nodes is designed to balance traffic while minimizing the number of hops required.

Implementation

The Nebraska Telehealth Network will be implemented in a phased approach. The following is a preliminary assessment of the implementation of major tasks. A detail project plan will be developed upon final agreement by participating hospitals.

Phase I (Estimated to take two plus months)
- Optimize and re-rate all network hub locations
  - T1 based facilities
  - IP support ensured, initial IP addressing established

- All necessary USF (Federal and State) approvals received
- End user location assessments completed
- Repair and support procedures documented
- Provisioning agreements documented
- IP Backbone Routes to be installed between selected hub sites (typically existing networks)
  - Evaluation/selection of Certificated Service Providers
  - Evaluation/selection of existing State networks if appropriate
  - Evaluation of CPE needs based on predetermined standards
  - End point Service Provider selection and provisioning needs identified
  - Installation and testing (end to end and passive switching)
  - IP addressing verified
  - End user training done as required
- The existing networks will be considered initial hubs, they are:
  - Good Samaritan Health Systems, Kearney, MNTN
  - BryanLGH Health System, Lincoln, Heartland Health Alliance
  - Regional West Medical Center, Scottsbluff
  - University of Nebraska Medical Center, Omaha
  - Saint Elizabeth Regional Medical Center, Lincoln, Teleradiology Network
  - Great Plains Regional Medical Center, North Platte, Teleradiology Network
  - Central Nebraska Area Health Education Center, Grand Island, CME/CNE
  -

Phase II (Estimated time - four months)

- End point hospitals working on existing telemedicine/telehealth networks will re-home to appropriate hub locations
  - Re-rate as required by Service Provider
  - Assure necessary USF applications and approvals received
  - Physical site assessment done if needed
  - IP address assigned
  - Provisioning order placed as required
  - CPE changes recommended if necessary
- Installation of hospitals scheduled with hub locations
  - End to end testing done to primary hubs using IP address
  - Passive routing testing done to remote hubs
  - End user training as required

Phase III (This phase will take the longest to implement—no time estimate made)

- End point hospitals not currently working with pre-existing networks scheduled
  - Rated T1 lines and engineering done by Service Provider(s)
  - Assure necessary USF applications and approvals received
  - Physical site assessment made
  - CPE recommendations made
  - IP address assigned
  - Provisioning order placed as required
- Installation of hospital T1 facility and CPE scheduled
  - Installation of facility with end to end and passive routing tested

- IP address verified
- End user training done as required

Phase IV (Time estimate to be determined)
- Expand the NTN to other health care providers and medical entities
- Evaluate public health entities becoming participants
- Evaluate inclusion of Health & Human Services as appropriate
- Evaluate and include bio-terrorism programs in association with federal CDC program

Funding Requirements

There are several assumptions being made with regard to funding:

1. Federal Universal Fund dollars will be used by all rural hospitals and participating health care entities;
2. The Nebraska Universal Fund dollars will be in addition to the Federal USF funding;
3. The USF funds would be used to pay for services provided by authorized Certificated Service Providers, those approved as ETC carriers for Federal USF funding;
4. ETC certification for any carrier will be documented as required for federal program;
5. Participating hospitals will have a choice as which service provider they choose to use;
6. The rules for determining pricing for urban and rural telecommunications facilities will remain as is for the next five years, or if there is a change the USF formulas would compensate and provide for a consistent pricing scheme;
7. All rural hospitals will pay the same monthly service fee;
8. All participating hospitals will pay an assessment for the backbone services providing interoperability.

These assumptions do not cover all day-to-day operating expenses such as personnel, billing, support and maintenance. It will be the responsibility of each participating hospital to budget for non-network costs as part of their normal service delivery.

Proforma Budget

It is the intent of this plan to not only provide a technically sound approach for a statewide Telehealth Network, but also one that provides the most cost effective network supporting as many telehealth applications as possible. The NUSF budget set aside to support the statewide Telehealth Network is $900,000 and the plan is developed to optimize telecommunications services to stay within that budget. The use of a common backbone providing passive switching, which will allow for re-homing of T1 circuits, will reduce monthly costs by optimizing mileage costs as well as reducing the total number of circuits required due to overlapping networks. While exact costs for circuits will need to be obtained through competitive bidding, estimates and assumptions have been made in a Proforma approach to ensure that the $900,000 budget would support the overall network.

The following spreadsheets use various assumptions as to the number of health care providers participating and backbone circuits required for the NTN. The intent of the Proforma is to determine if the design will support the number of users expected along with the anticipated network traffic with the allotted $900,000 budget.

Example 1 – 50 participating health care providers

Proforma Attachment 1

Example 2 – 60 participating health care providers

Proforma Attachment 2

Example 3 – 70 participating health care providers

Proforma Attachment 3

Conclusion

The use of IP technology to address the technical aspects of a statewide telehealth network, along with the use of an open standards based approach to networking, will accommodate all current telehealth/telemedicine applications. Video, voice, text and data transmissions can be routed to virtually any participating health care provider in the State of Nebraska. The use of a common backbone will reduce the number of circuits currently in use by using a passive switching approach that will optimize costs for T1 circuits.

The proforma assumptions, which have been purposely conservative, indicate that the overall budget provided by the NUSF would accommodate the network in most scenarios. The goal of offering rural health care providers an affordable telehealth network can be implemented in a reasonable period of time. This telehealth network would link not only existing telehealth and telemedicine networks, but would expand the health care services available throughout the state.

On behalf of the members of the Nebraska Hospital Association members who have been working with other Nebraska public sector entities, we ask that this plan be approved.

Dated: May 23, 2003

Respectfully submitted,

The Nebraska Hospital Association on behalf of its member hospitals and the Nebraska Telehealth Development Group

By: Roger S. Keetle
        Nebraska Hospital Association
        1640 L Street, Suite D Lincoln,
        NE, 68508 (402) 458-4906

_____
Roger S. Keetle (#21164)

CERTIFICATE OF SERVICE

      I hereby certify that on the 22nd day of May, 2003, the original and five (5) paper copies together with an electronic copy of the foregoing Comments was served upon Andy S. Pollock, Executive Director of the Commission, by hand delivery, and one copy was served upon other parties to this proceeding as noted in the attached list by U.S. Mail, postage prepaid.

                                               _____
                                             Roger S. Keetle

Nebraska Information Technology Commission
Technical Panel
Statewide Synchronous Video Network Work Group
May 28, 2003 Meeting
UNK Student Union Room 310

To Do's [Due Date: May 23, 2003]   *Underlined* <u>*name*</u> *denotes task group leader*

Develop structural options and responsibilities for "core sponsor"-<u>**Pat Hoffman,**</u> **Wayne Erickson, Wayne Fisher** (*This group will brainstorm several different options for what is termed, "core sponsor", "responsible for being the focal point to coordinate all of the activities associated with enhancement of services and interrelationships that will be critical for continued success."*)

Network(s) Inventory (Max Thacker & Tom Rolfes takes lead)-All
(*Each SSVWG member will take responsibility for responding to the network survey and making sure every education, telehealth, National Guard, and state agency video network is represented and described in the inventory.*)

Brainstorm list of linkages between and among different sectors-<u>**Aimee Lempke,**</u> **Max Thacker, Jayne Scofield, Michael Derr.** (*This group will define all the possible interrelationships between different sectors and their use of the video network; from co-location of facilities to content sharing to cooperative training development.*)

Develop needs matrix (Aimee Lempke helps define)-Each Sector
(*Each sector—Education, telehealth, state agencies, informal education, National Guard, etc… will contribute to a matrix of needs/requirements such as bandwidth, quality of service, security, etc…*)

Determine Continuum of Interconnectivity, Governance, Funding responsibility, Contracting, Costs-<u>**Tom Rolfes,**</u> **Shirley Schall, Nigel Buss.** (*This group will develop a continuum graphic and narrative that portrays the different options for the eventual Statewide Synchronous Video Network; from the status quo environment to a $multi-million new network.*)

Examine potential, future contract scenarios, migration plan (restrictions, impediments, barriers)-Michael Beach, <u>**John Horvath,**</u> **Charles Doyle, Wayne Fisher, Bruce Thiel** (*This group will explore and define the various options for contracting services; by institution, consortium, region, statewide and suggest a video standard migration plan to improve video interconnectivity.*)

Identify outside partners for support (UP, NE Car Dealers Assoc., Cisco, Certification/Accreditation, Other State resource people)-<u>**Sarah Cunningham,**</u> **John Stritt, Mike Danahy.** (*This group will brainstorm a list of resource people who could present to the SSVWG on various topics.*)

Pro's and Con's of IP communication protocols; planning for transcoding, designing draft network-<u>**Ron Cone,**</u> **Shawn Safford, Michael Beach, Max Thacker.** (*This group will begin to explore the technical challenges related to a statewide synchronous video network; from gateway solutions to network topology.*)

<u>**Next Steps**</u>
June 15, 2003: Revise all task group documents and post to NITC SSVWG Web site
June 15-July 30: SSVWG members communicate with and gather feedback from sub-sector peers; complete survey of
        distance learning networks.
July 30, 2003: All day meeting in Lincoln
August 15, 2003: Circulate first draft of preliminary recommendations
September 10, 2003: Present draft of recommendations to NITC Technical Panel
Late September: All day meeting, Location TBA

Technologies Across Nebraska
Community Information Technology Survey

Results and Recommendations

May 12, 2003

Survey Results

Surveys were sent to 25 applicants for the Community IT Planning and Mini Grant program. Sixteen surveys were returned, yielding a response rate of 64%.   The survey results should not be interpreted as representative of all communities in Nebraska. However, the survey results do provide a good indication of the IT-related training needs of the communities most likely to participate in programming offered by Technologies Across Nebraska.

Information Technology Committees

Eighty-one percent of the respondents indicated that their communities had technology committees.   Several respondents indicated that their local technology committee has been in existence for ten years.   Other respondents indicated that their committees were less than a year old.

Importance to the future of your community

Respondents were asked to rate the importance of eight areas of technology development. Seven out of the eight areas were rated as important or very important by nearly 90% of the respondents. Only using technology to provide government services was rated as important or very important by less than 88% of the respondents.   The areas evaluated and the percentage of respondents rating the area as important or very important are listed below:

- Developing a technology plan (100%)
- Fostering teleliteracy (94%)
- Using technology to expand access to health care (94%)
- Encouraging e-commerce (94%)
- Pursuing IT-related economic development (94%)
- Identifying funding sources for technology projects (88%)
- Using technology to enhance educational opportunities (88%)
- Using technology to provide government services (63%)

Three respondents listed other areas that were important to the future of their community. The areas listed include:

- Technology related to entrepreneur development
- Technology related to youth entrepreneur development
- Education business owners and consumers on effective use
- E-commerce education and training for retail businesses

Interest in participating in educational opportunities

Respondents indicated a strong level of interest in participating in educational opportunities on technology-related development.   At least 75 percent of the respondents indicated interest or great interest in participating in educational opportunities in six of the eight topics listed.   Using technology to provide government services received the lowest interest ratings with only 50 percent of the respondents indicating interest or great interest in participating in programming on this topic.

The topics and the percentage of respondents indicating interest or great interest in participating are listed below:
- Pursuing IT-related economic development (88%)
- Developing a local technology plan (81%)
- Using technology to enhance educational opportunities (81%)
- Using technology to expand access to health care (81%)
- Encouraging e-commerce (81%)
- Identifying funding sources for technology projects (75%)
- Fostering teleliteracy (69%)
- Using technology to provide government services (50%)

Delivery Methods and Activities

The most preferred delivery methods of educational programming are a bimonthly e-mail newsletter, Web site resources, workshops (one-half day), and conferences (one day). Delivery methods and the percentage of respondents indicating interest or great interest are listed below:

Bimonthly e-mail newsletter (87%)
Web site resources (81%)
Workshops--half day (75%)
Conferences--one day (69%)
Videoconference workshops--1 to 2 hours (60%)
E-mail discussion list (56%)
Web streaming (50%)
Speakers bureau (50%)
Regional meetings of IT committees (50%)
Videotapes (47%)

Distance Willing to Travel

Forty-four percent of the respondents would travel 51 to 100 miles to attend a conference or workshop.   Twenty-five percent would travel 100 to 200 miles.   Twenty-five percent would travel 10 to 50 miles.   Only six percent would be willing to travel over 200 miles.

Conference Fees

Fifty-six percent of the respondents would be willing to pay $26-$59 to attend a one day conference.

Community IT Toolkit

Eighty-one percent of the respondents had visited the Community IT Toolkit Web site. Of those who had visited the toolkit Web site, seventy-seven percent rated the toolkit as moderately or extremely useful.

Usefulness of Web Resources

Resource listings, funding opportunities, and workbooks which provide step by step instructions were the Web resources rated as the most useful by respondents.   The Web resources and the percentage of respondents rating each as moderately useful or extremely useful are listed below:

- Resource listings (87%)
- Funding opportunities (87%)
- Workbooks which provide step by step instructions (73%)
- FAQs (67%)
- Case studies (64%)
- Video clips (40%)
- Bulletin board (40%)

One respondent also asked for resources which focused on the uses and benefits of technology in agriculture.

Gap Analysis

Educational Opportunities

The topics in which respondents expressed the greatest interest in receiving training are:
- Pursuing IT-related economic development (88%)
- Developing a local technology plan (81%)
- Using technology to enhance educational opportunities (81%)
- Using technology to expand access to health care (81%)
- Encouraging e-commerce (81%)

Of these four topics, the need for additional training opportunities is greatest for pursuing IT related economic development. Currently no programming is addressing IT-related economic development. Some resources on this topic are available through the *Community IT Toolkit* and through the Department of Economic Development, though.

Delivery Methods

The most preferred delivery methods are a bimonthly e-mail newsletter; Web site resources; workshops, and conferences. Currently a bimonthly newsletter on IT-development is not available. Developing a bimonthly newsletter would be relatively inexpensive and easy.

The TAN and Community IT Toolkit Web sites currently provide information on technology-related development and are perceived as useful resources. Resource listings, funding opportunities, and workbooks which provide step by step instructions were the Web resources rated as the most useful by respondents. The Community IT Toolkit currently contains resource listings and limited information on funding opportunities. The list of funding opportunities can be expanded. The Community IT Toolkit contains a workbook on IT planning and assessment. Additional workbooks could be developed on other topics.

There may be a need for regional workshops—especially on pursuing IT-related economic development. Since the Building Information Age Communities Conference which was held last year, TAN has not sponsored a workshop or conference on IT-related development. Congressman Osborne's office has sponsored a number of e-commerce workshops across the state. Those workshops, however, have not addressed other issues related to IT-related economic development.

Recommendations

1. Publish a bi-monthly e-mail newsletter on technology-related development.
2. Continue to maintain and update the TAN and Community IT Toolkit Web sites.
3. Add funding information to the Community IT Toolkit Web site.
4. Work with TAN partners to develop and deliver regional workshops on IT-related economic development.
5. Continue the IT Planning and Mini Grant program.

June 10, 2003

TO: NITC Commissioners

FROM: Rick Becker

SUBJECT: **E-Government Update**

This is an update on recent, and planned, e-government activities at the enterprise level of state government.

1. E-GOVERNMENT STRATEGIC PLAN

The State Government Council adopted a revised *E-Government Strategic Plan for Nebraska State Government* in March 2003. The E-Government Strategic Plan has three purposes. First, the plan is intended to achieve the vision and goals of the NITC pertaining to e-government. Second, it strives to communicate those goals, related activities, and opportunities to policy makers. Third, it serves as a guide to state agencies as they plan and implement e-government solutions. The plan identified 26 specific actions and recommendations. (http://www.nitc.state.ne.us/sgc/documents/egovstrategy_20030313.pdf)

2. WEB PORTALS

A. State Portal (www.Nebraska.gov)
- Minor revisions were made to accommodate the addition of new sub-portals for Education, Citizens, and State Employees.
- Other changes and improvements are being made with an anticipated rollout in June or July.

B. Business Portal (www.Nebraska.gov/business)
- Recent Activities
  - A searchable database of agency Rules and Regulations was created.
  - A Rules and Regulations tracking system is in final testing.
- Enhancements planned over the next 12 months:
  - Reviewing business forms inventory to identify high volume forms for automation.
  - Coordinating efforts on improvements with Nebraska Business Development Center, Department of Economic Development, and Secretary of State.
  - Plan to seek additional input from economic development professionals.
  - Will work with agencies involved in business registration regarding an online business registration system.
  - Will work with State Patrol to determine strategy and timeline regarding access to criminal history information.

C. Education Portal (www.Nebraska.gov/education)
- New portal for education was operational in January 2003.
- Enhancements planned over the next 12 months:
  - Searchable IT training calendar
  - Single Web-based higher education admission form
  - Searchable database of course offerings and programs from higher education institutions

D. Citizen Portal (www.Nebraska.gov/citizen)
- New portal for citizens was operational in May 2003.
- Enhancements planned over the next 12 months:
  - Legislative bill tracking system
  - E-mail push technology
  - Work with Accountability and Disclosure Commission regarding campaign finance information available on the Web
  - Enhancements to voter and election information
  - Provide a central registration point for e-mail news and distribution lists maintained by state agencies

E. State Employee Portal (www.Nebraska.gov/employee)
- New portal for state employees was operational in May 2003.

3. FORMS AUTOMATION

A. Online Licensing
- Using a grant from the State Records Board, Nebrask@ Online (NOL) has automated five professional license renewals, which can now be completed on-line: Dentists; Dental Hygienists; Pharmacies; Medical Nutrition Therapists (June); and Physical Therapists (July).
- In addition to other licensing activities, NOL plans to automate another 10 professional licenses over the next year using SRB grant funds.

B. Online Forms
- Since July 2002, NOL has automated 217 form pages for four agencies. All but three are editable PDF documents which can be filled out online, printed, and mailed. Data from the other three can be transmitted electronically. This work is being done at no cost to the agencies through a grant from the State Records Board.
- NOL is reviewing the database of business related forms to ensure that the highest volume state forms are available online.

4. INFRASTRUCTURE

A. Payment Portal
- Some online transactions with state government require users to pay fees or other costs. A payment portal has been developed to process these payments by either credit card or electronic check. Any agency application that requires users to make a payment will be able to link to the payment portal, eliminating the need to recreate this functionality.

B. Search Engine
- A new search engine was added to the State Portal which provides improved search results.

5. OTHER

A. RFP for management services for the Nebrask@ Online Network

The Nebraska State Records Board has issued an RFP seeking a "contractor to operate and manage the Nebrask@ Online Network, the State's information and communication system created to provide equal electronic access to public information for the citizens, businesses and state, county, local governments across Nebraska."

Proposal opening will occur on July 17, 2003, and the contract award is scheduled for September 8, 2003.

The contract resulting from the RFP will be issued for a period of three years beginning February 1, 2004, with renewal options for three additional years.

Statewide eLearning Initiative

enhanced   extended   enriched   effective   efficient   engaging

$Ne^nLearning$

educational   equitable   entertaining   essential   exciting   evolving

electronic   enlightening   elastic   elegant   eloquent

exceptional   exhilarating   extraordinary   exquisite   esteemed

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Statewide eLearning Initiative

Observations

Innovation in eLearning is occurring now throughout the state of Nebraska at all levels and adoption and integration of technology into instruction will continue to increase in the future.

Collaboration between K-12 and Higher Ed to develop effective eLearning models and instructional development training for instructors will be critical.

Statewide eLearning Initiative

HigherEd – in-process activities

Four major HEd initiatives emerged:

1) Negotiate aggregated Course Management SW licensing and purchasing agreements
2) Establish a plan for developing and deploying eLearning instructional design training for instructors
3) Develop a strategy for sharing and managing content
4) Develop long-term strategy for eLearning

Statewide eLearning Initiative

K-12 – in-process activities

Pilots:

- **Tri-Valley Distance Ed consortium** – John Stritt/UNK host/Blackboard (initiated)
- **Lincoln Public Schools** – Chuck Friesen/UNL host/Blackboard (initiated)
- **Laurel/Concord** – Eddie Elders/Wayne State host/WebCT (initiated)
- **District 66** – Colette deFrey/Blackboard (initiated)

Statewide eLearning Initiative

Why eLearning??

- **Access** - any time, any place, any path, any pace
- **Equity** - extends learning opportunities and enhances the learning experience
- **Affordability** - facilitates the sharing of educational content and the leveraging of instructional resources

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Statewide eLearning Initiative

Why eLearning??

- eLearning technologies are interactive; therefore it is easier to create environments in which students actively participate in the learning experience, receive feedback, continually refine their understanding, and build new knowledge.
- eLearning helps students visualize and comprehend difficult-to-understand concepts through methods such as simulations and opportunities to engage in real-world problem-solving.

Statewide eLearning Initiative

Why eLearning??

- Empowers students to become active producers of knowledge (discussion groups, charts, publishing)

- Fosters development of higher-order thinking skills (organize complex info, recognize trends & patterns, draw inferences, collaborate)

- Ensures student mastery (integrated assessment tools and learning systems track student progress)

- Provides access to resources unavailable in any other medium (audio, visual, dynamic, analytical)

- Learning institutions become the hub of a wider networked learning community

NITC Meeting – June 10, 2003   7   UN/NDE/ NITC

Statewide eLearning Initiative

The essence of this initiative is to connect the innovators and experts that already exist and leverage their experience and expertise to develop strategies to insure the effective and efficient deployment and utilization of eLearning tools and techniques and the integration of these technologies into the instructional process to deliver educational opportunities to students at all levels throughout Nebraska on an equitable and affordable basis.

(aka - <u>advancing the academic agenda</u>)

The <u>challenge</u> = how to make all this happen??

NITC Meeting – June 10, 2003   8   UN/NDE/ NITC

Statewide eLearning Initiative

A unique window of opportunity exists now, and for perhaps the next 12 months, to move this initiative forward. This opportunity exists due to many factors: the maturation of course and content management software, the explosive growth in the use of the internet, the need to provide educators additional instructional tools/options, the need to extend learning opportunities throughout the state, statewide K-12 education standards, and budget constraints.

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Statewide eLearning Initiative

These factors have combined to provide a situation in which there is an unprecedented interest in cooperation and collaboration in education at all levels throughout the state of Nebraska.

Nebraska needs to identify an entity responsible for the promotion, adoption, and effective utilization of technology in the support of education in the state of Nebraska at all educational levels.

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Statewide eLearning Initiative

<u>Three major areas of initiative:</u>

1) <u>Course management</u> - negotiate aggregate purchasing/licensing agreements and assist entities in the deployment and effective use of this technology

2) <u>Content management</u> – develop a strategy to put into place a Nebraska Educational Knowledge Repository to facilitate the sharing of educational resources

3) <u>Infrastructure</u> – develop and implement a plan to put in place the technical, organizational, and administrative resources required to support eLearning statewide

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Statewide eLearning Initiative

We are proposing convening an eLearning Initiative Workshop to develop an action plan on how to proceed in organizing the eLearning Consortium.

We feel this workshop should be convened as soon as possible.

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Statewide eLearning Initiative

Future activities

- Define eLearning goals and objectives
- Identify Initiative "sponsor" (candidates = NITC, P-16, NE Dept of Ed, NCITE, ???)
- Organize NE eLearning Consortium - address the issues of structure, membership, governance, accountability, authority, etc

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UN/NDE/ NITC

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Statewide eLearning Initiative

Acknowledgements - eLearning Initiative participants:

- NITC, NDE, P-16, NCITE, NDLA
- K-12 – ESUs, NWSDAC, LPS, Distance Ed Consortiums, MOEC, District 66
- Higher Ed – all NE publics and privates - i.e. UN system, State Colleges, Community Colleges, and all private IHEd in the state
- UNL, UNO, UNK, UNMC, CSC staff

NITC Meeting – June 10, 2003

UN/NDE/ NITC

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Statewide eLearning Initiative

We welcome your input, involvement, and support!!!

Contacts:

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Tom Rolfes – NITC trolfes@cio.state.ne.us

Jim Zemke – UNComputing jzemke@nebraska.edu

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Statewide eLearning Initiative

enhanced   extended   enriched   effective   efficient   engaging

$Ne^nLearning$

educational   equitable   entertaining   essential   exciting   evolving

electronic   enlightening   elastic   elegant   eloquent

exceptional   exhilarating   extraordinary   exquisite   esteemed

NITC Meeting – June 10, 2003

UN/NDE/ NITC

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June 10, 2003

TO: NITC Commissioners

FROM: Steve Schafer

SUBJECT: **Security Initiatives Update**

This is an update on current activities regarding security.

1. SECURITY WORK GROUP

The Security Work Group (http://www.nitc.state.ne.us/tp/workgroups/security/index.htm) has met four times since January. We are finishing security guidelines on two topics: wireless networks and remote access and will forward recommendations to the Technical Panel in July. Future subjects of interest include secure communications, SPAM control, creating regional Computer Incident Response Team, developing minimum security requirements for agencies, and preparing a strategic plan to guide the work of the committee.

2. AUTHENTICATION

Two initiatives are in progress. The Information Management Services Division has purchased software for deploying an LDAP-compatible directory services. A work group of the State Government Council (http://www.nitc.state.ne.us/sgc/workgroups/directory/index.html) is making recommendations for standard procedures for data classification, access, resetting passwords, and other implementation issues.

The other initiative will provide a means for authentication of users over the Internet for applications that require a legal signature. The system will use the directory services application above and will verify a person's identify against information already in state databases, such as drivers license data or Department of Revenue data.

3. AWARENESS / TRAINING

Using a grant from the Government Technology Collaboration Fund, IMServices evaluated a web-based solution for providing basic security training to a large number of users. The "Managed Ongoing Awareness Training" program integrates security training with policy management, reporting, tracking & change management. Over 700 people used the training on a trial basis. Results were generally positive – almost 90% of those responding to an evaluation survey rated the training as good, very good, or excellent. The application permits each agency to add unique policies to the training modules. It also keeps track of who has completed which sections of the training program.

The cost of the program is $6 per user, with hosting by IMServices, if we purchase an enterprise license for 8,000 users. We are now determining what agencies are interested in participating.

4. BUSINESS CONTINUITY / DISASTER RECOVERY

The Nebraska Emergency Management Agency recently revised the State Emergency Operations Plan, which guides the state's emergency response activities. The new version recognizes the importance of continuity of government and requires "each state agency and local government to develop a continuity of operations plan (COOP) and a disaster plan for information technology." It also requires agencies to follow the NITC's guidelines for disaster recovery planning (http://www.nitc.state.ne.us/standards/index.html). With recent funding from the state's Homeland Security grant, the Department of Administrative Services and the State's Chief Information Officer will lead a multi-agency effort to comply with this requirement.

5. NETWORK VULNERABILITY ASSESSMENT

Using a grant from the State Government Collaboration Fund, the CIO has hired a network security firm to conduct an external vulnerability assessment of the state's network. Findings and recommendations will be available in July.

6. SECURE COMMUNICATIONS

Several state agencies are exploring different options to provide secure e-mail and other electronic communications among state agencies and between state agencies and business partners.   They will present draft standards to the Security Work Group for consideration.

U N I T E D   2 0 0 3

Nebraska's Statewide Technology Plan

June 2003
State of Nebraska
Nebraska Information Technology Commission
521 S. 14th Street, Suite 200
Lincoln, NE   68508-2707
(402) 471-3560

UNITED 2003 Nebraska's Statewide Technology Plan
Is available from the NITC Web site:
http://www.nitc.state.ne.us

Table of Contents

Section 1

Introduction

Section 1
Introduction

The Legislature established the Nebraska Information Technology Commission (NITC) in 1998 to provide advice, strategic direction, and accountability on information technology investments in the state. Section 86-516 directs the NITC to "annually update a statewide technology plan." *Nebraska's Statewide Technology Plan* for 2003 is the fourth iteration. The complete plan is available on the NITC Web site (www.nitc.state.ne.us).

To achieve its mandate, the NITC relies on coordination and collaboration to influence a wide range of information technology issues. The NITC has neither operational authority nor enforcement powers for implementing its policy directives. The NITC has adhered to the legislative directive in Section 86-513 to "coordinate the state's investment in information technology in an efficient and expeditious manner. The provisions (of Sections 86-512 to 86-524) are not intended to impede the rapid deployment of appropriate technology or establish cumbersome regulations or bureaucracy."

Given these considerations, the purpose of the *Statewide Technology Plan* is to set forth the vision and goals for the use of information technology in Nebraska, with a set of action items that will guide the work of the NITC and its councils. The *Statewide Technology Plan* does not allocate funding among technology projects. A different report, "Recommendations on Technology Investments to the Governor and Legislature" (http://www.nitc.state.ne.us/docs/2002report/budgetreport.pdf), provides advice on proposed funding for technology projects, as part of the biennial budget process.

Previous versions of the *Statewide Technology Plan* included two other sections. One was the Technical Infrastructure, which defined a technical architecture and the process for preparing technical standards and guidelines. The other section set forth planning and project management requirements. In the interests of brevity, these sections are now presented as separate documents. Both are located on the NITC Web site. Both are incorporated into the *Statewide Technology Plan* by reference.

The NITC conducts most of its work through three advisory groups and the Technical Panel.

The Community Council has 18-24 members from each of its three focus areas (rural and community information technology development, local governments and libraries, and telehealth), resource providers, and other groups as deemed appropriate by the Community Council and the NITC. The Community Council focuses on the role of information technology in community and economic development. It seeks to foster the collaborative and innovative use of technology through partnerships between public and private sectors, to improve teleliteracy, and to support community and economic development for Nebraska citizens.

The Education Council has 16 members, eight representing the K-12 sector, eight representing the postsecondary sector, and four liaisons as representatives of the Department of Education, the Coordinating Commission for Postsecondary Education, the Department of Administrative Services, and the Nebraska Educational Telecommunications Commission. The Education Council works on common areas of interest in the use of information technology across all sectors of education from elementary through postsecondary levels and including public and private institutions. The Education Council advises the NITC on education information technology needs, goals, and policy. The Council identifies, coordinates, and prioritizes matters pertaining to information technology for a more strategic and cost-effective approach to developing the State's education information technology infrastructure.

The State Government Council has 24 members representing state agencies and 2 members chosen from the private sector, with experience in managing major information technology systems. The mission of the State Government Council is to provide direction and oversight for state government information technology vision, goals and policy. It promotes collaboration on technology issues among state agencies.

The Technical Panel is a statutory body, which provides technical analysis and recommendations to the Commission. The Technical Panel is codified at Neb. Rev. Stat. § 86-1511. It consists of seven members appointed by the Commission.   The mission of the Technical Panel is to assist in the development of a statewide technical infrastructure that will be scalable, reliable, and efficient, including a shared statewide telecommunications network. It provides technical analysis of projects and recommends technical standards and guidelines.

Each of the councils and the Technical Panel has a charter, adopted by the NITC, which establishes the council membership, responsibilities, and meeting procedures.   Charters, proceedings, and other information are available on the NITC Web site.

The NITC also recognizes the important contributions of other information technology coordinating entities, such as the Criminal Justice Information Systems (CJIS) Advisory Committee, and the Geographic Information Systems (GIS) Steering Committee.   The CJIS Advisory Committee includes representatives of state and local agencies involved in all aspects of criminal justice.   It conducts strategic planning and sponsors automation and data sharing projects.   Further information about the CJIS Advisory Committee is available at http://www.cjis.state.ne.us/.   The Legislature established the GIS Steering Committee in 1991 (Sections 81-2601 through 81-2605), in an effort to coordinate the implementation of GIS technology by state and local governments in Nebraska.   Membership on the GIS Steering Committee includes local, state, and federal representatives.   Further information about the GIS Steering Committee is available at http://www.calmit.unl.edu/gis/.

The NITC encourages other information technology coordinating entities to collaborate with the NITC and its advisory councils.

The vision of the NITC is to improve the quality of life of all Nebraskans by promoting the use of information technology in education, health care, economic development and all levels of government. To achieve this vision, the NITC has identified four goals:

1. **Support the development of a robust statewide telecommunications infrastructure that is scalable, reliable, and efficient;**
2. **Support the use of information technology to enhance community and economic development;**
3. **Promote the use of information technology to improve the efficiency and delivery of governmental and educational services, including homeland security;**
4. **Promote effective planning, management and accountability regarding the state's investments in information technology.**

Section 2 of the *Statewide Technology Plan* presents detailed objectives.

Section 3 provides a list of action items that the NITC Councils and Technical Panel will undertake to achieve the goals and objectives. Some of the action items include:

Telecommunications Infrastructure
- Bandwidth Aggregation /NETCOM (led by the Collaborative Aggregation Partnership, with advice from the Network Policy Work Group and the Network Architecture Work Group)
- Statewide Synchronous Video Network Implementation Planning
- Statewide Telehealth Network Development

Community and Economic Development
- Encouragement and support technology-related development
- Grants and support for community IT planning

Delivery of Government and Educational Services
- E-Government Strategic Plan (Business Portal, Citizen Portal, Education Portal, and Infrastructure improvements)
- Nebraska eLearning Initiative
- E-mail standard for state government
- Juvenile data sharing

Planning and Accountability
- Security Policies and Procedures
  - Security standards, guidelines and best practices
  - Security assessments
  - Secure communications
  - Directory Services
- Project reviews

Section 4 is a status report of what has been accomplished to date, with effectiveness measures to evaluate progress in the future.

Section 2
Goals

Section 2

Goals

NITC Vision Statement

It is the vision of the NITC to promote the use of information technology in education, health care, economic development, and all levels of government services to improve the quality of life of all Nebraskans.

NITC Mission Statement

The mission of the Nebraska Information Technology Commission is to make the State of Nebraska's information technology infrastructure more accessible and responsive to the needs of its citizens, regardless of location, while making investments in government, education, health care and other services more efficient and cost effective.

NITC Goals and Council Priorities

The NITC has adopted the following goals. The goals are supported by the priorities developed by the respective NITC Councils and the Technical Panel for achieving the vision and goals of the NITC.   Section 3 provides detailed action plans for 2003-04 associated with the priorities of the Community Council (CC), Education Council (EC), State Government Council (SGC), and Technical Panel (TP). Section 4 includes a progress report of the 2002-03 action items.

1. **Support the development of a robust statewide telecommunications infrastructure that is scalable, reliable and efficient.**

    COUNCIL PRIORITIES:

    CC-1. Promote the development of an infrastructure (including sufficient bandwidth that is secure, affordable, reliable, and responsive to the specific needs of various sectors. Efforts should be made to ensure that systems across the state are compatible.

    EC-1. Provision of an infrastructure that will permit all citizens to have access to the same educational experiences, regardless of location.

    TP-1. Support the development of a robust statewide telecommunications infrastructure that is scalable, reliable and efficient.

2. **Support the use of information technology to enhance community and economic development.**

    COUNCIL PRIORITIES:

    CC-2. Support the development of the intellectual infrastructure necessary for Information Age development. Intellectual infrastructure includes the development of a workforce knowledgeable of and fluent in the use and applications of information technology and the availability of IT support services.

    CC-3. Develop leadership capacity in Nebraska's communities to address information technology development.

    CC-4. Encourage the use of information technology to enhance community and economic development.

    CC-5. Foster awareness and collaborative and innovative uses of information technology by local governments to reduce costs, improve efficiency, and provide better customer service.

3. **Promote the use of information technology to improve the efficiency and delivery of governmental and educational services.**

    COUNCIL PRIORITIES:

    EC-2. Identification and facilitation of diverse training opportunities.

    EC-4. Accommodation of learner needs.

    EC-5. Coordination of statewide education information technology efforts and resources, including collaboration with public and private entities.

    EC-6. Pursuit of leading edge technology applications to enhance teaching and learning.

    SGC-1. Implement e-government to provide for a cost effective, efficient delivery of services while maintaining necessary security and confidentiality of non-public information.

4. **Promote effective planning, management and accountability regarding the state's investments in information technology.**

COUNCIL PRIORITIES:

EC-3. Ensurance of life cycle funding.

SGC-2. Improve collaboration and efficiency through technical standards, guidelines, and enterprise solutions.

SGC-3. Provide a planning and implementation process for IT projects which avoids unnecessary delay and bureaucracy.

SGC-4. Implement appropriate policies for information technology related security and privacy.

TP-2. Develop a technical architecture, including recommended standards and guidelines, to provide for interoperability and greater efficiency in IT systems.

TP-3. Review technology projects or requests for funding recommended to the NITC, including budget requests, NITC grant requests, and Information Technology Infrastructure Fund projects.

NITC Customer Service Policy

The NITC emphasizes collaboration for establishing goals and carrying out their statutory duties. Success of the NITC depends on the willing cooperation of independent, public and private, state and local, entities. State statute explicitly recognizes the importance of "coordinating the state's investments in information technology in an efficient and expeditious manner." (Section 86-1502) The same statute directs the NITC to achieve this goal in a manner that does not "impede the rapid deployment of appropriate technology or establish cumbersome regulations or bureaucracy. "

Good customer relations require involving representatives of all relevant perspectives in the decision-making process. The NITC has sought to achieve this by insuring broad-based representation on the Community, Education and State Government Councils and their volunteer work groups. In addition, the NITC encourages good communication with other coordinating bodies, such as the Geographical Information System (GIS) Steering Committee and Criminal Justice Information Systems (CJIS) Advisory Committee.

The NITC promotes good communication by making effective use of the Internet. Meeting notices, agendas, minutes, and working documents are posted on the NITC Web site (www.nitc.state.ne.us). Meeting notices are also posted to the State 's searchable public meeting calendar (www.nol.org/calendar/activity.cgi). Councils and work groups have fully developed Web sites that are linked to the NITC Web site. In addition, NITC publishes an electronic newsletter, *NITC.news*, which has a distribution list of over 900 individuals.

Section 3

Action Plan

Section 3

Action Plan

Summary

The NITC has prepared an action plan consisting of twenty action items which address the NITC's four goals of supporting the development of a robust telecommunications infrastructure; supporting community and economic development; promoting the efficient delivery of government and educational services; and promoting effective planning and accountability.   The NITC's 2003-2004 action items are listed below.   A brief description of each action item is also included in this section.

Action Items	Sponsorship*
Telecommunications Infrastructure	
Provide technical support for the Collaborative Aggregation Partnership for the development of statewide network services	TP 1.1
Provide technical support for aggregation and consolidation of networks	TP 2.2
Support the Nebraska Network through the Network Policy Work Group	CC 3, EC 1.2, SGC 2.3
Determine statewide synchronous video network requirements	TP 2.2.1, EC 1.1
Support the development of the Nebraska Telehealth Network	CC 2
Address the need for sufficient rural bandwidth	EC 1.2
Community and Economic Development	
Encourage and support community IT development	CC 1
Efficient Delivery of Government and Educational Services	
Determine the business case for reinstatement of the Technology Training Grant Fund	EC 2.1
Support the Nebraska eLearning Initiative	EC 5.1
Assist in the development of value-added services for the Nebraska "Click into Education" portal	EC 5.2
Study and promote effective synchronous and asynchronous instructional methods	EC 6.1
Implement *E-Government Strategic Plan*	SGC 1.1
Develop guidelines for electronic records retention	SGC 2.2
Recommend technical standards, guidelines, best practices, and enterprise solutions	TP 2.1, SGC 2.1
Planning and Accountability	
Improve planning process and project management	SGC 3.1
Communicate with policymakers	SGC 3.2
Develop and implement security policies	SGC 4.1
Conduct project reviews—statutory	TP 3.1
Conduct project reviews—other	TP 3.2
Revise procedures for reviewing IT projects and purchases by state agencies	TP 3.3

*Action items were prepared and recommended by the NITC's advisory groups.   Numbers refer to the identification of the action item on the advisory group's action plan. The following abbreviations are used to indicate advisory groups:
CC   Community Council
EC   Education Council
SGC   State Government Council
TP   Technical Panel

Action Items

Telecommunications Infrastructure

Provide technical assistance to the Collaborative Aggregation Partnership (CAP) for the Development of Statewide Network Services (TP 1.1)

Description: The Technical Panel will provide technical assistance for the implementation of statewide network services through the CAP and related work groups.

Lead: Brenda Decker, Network Architecture Work Group

Timeframe: Ongoing

Expected Outcomes:

- The implementation of statewide network services will address technical considerations of potential network users.

Provide technical assistance for aggregation and coordination of networks (TP 2.2)

Description: The Technical Panel will provide technical assistance for the aggregation and coordination of networks.

Lead: Assigned by subject

Timeframe: Ongoing

Expected Outcomes:

- Technical assistance will be provided to aid in the aggregation of networks.

**Support the Nebraska Network project through
the Network Policy Work Group (CC 3, EC 1.2, SGC 2.3)**

Description: The Community, Education, and State Government Councils will
assist the Network Policy Work Group with developing
recommendations on policy issues pertaining to the management and
operation of shared networks, including input to the Collaborative
Aggregation Partnership.

Lead: Office of the CIO

Timeframe: Ongoing

**Expected
Outcomes:**

- A governance model for the shared network will be developed.
  Included in the model will be network administration, help desk
  services, and billing functions.
- A catalog of network services, including a price schedule, will be
  adopted.

**Determine statewide synchronous video network requirements
(EC 1.1, TP 2.2.1)**

Description: The NITC Technical Panel's Statewide Synchronous Video Work
Group, with assistance from the Education Council, will define the
technical and non-technical requirements for interconnecting all
synchronous video networks and meeting the scheduling needs of
different participants. Issues to be addressed include business case,
scheduling, traffic prioritization, security, quality assurance, cost-
sharing, and existing contractual arrangements of regional networks.

Lead: Michael Beach, Chair, Statewide Synchronous Video Work Group

Timeframe: July, 2003 - December, 2004

**Expected
Outcomes:**

- Recommendations will be advanced to the Technical Panel that
  provide increased efficiency in synchronous video network usage,
  combined with a solid business case.
- En route to its final report, the Statewide Synchronous Video
  Work Group will complete a thorough survey of video networks,
  suggest a migration plan for classrooms with obsolete video

equipment, and recommend a core sponsor to assume statewide coordination of video events.

Support the development of the Nebraska Telehealth Network (CC 2)

Description: The NITC will support the development of a statewide telehealth network in the following ways:
- The NITC and the Telehealth Subcommittee should facilitate communication and coordination among telehealth networks.
- The Telehealth Subcommittee and NITC staff should provide continuing assistance to the Nebraska Hospital Association in developing a telehealth plan for the Nebraska Public Service Commission.
- The NITC Technical Panel should address the need for interoperability.

Lead: Telehealth Subcommittee and NITC

Timeframe: June, 2003- December, 2003

Expected Outcomes:

- Telehealth systems in Nebraska will be interconnected.
- The number of critical access and rural hospitals participating in telehealth systems will increase—especially in the second year of implementation of the system.
- The number of telehealth consultations in the state will increase.
- Health care providers will have better access to continuing medical education.
- Specialist services, especially mental health services and teleradiology, will be more accessible in rural areas.

Address the need for sufficient rural bandwidth (EC 1.2)

Description: The Education Council will assist the Network Architecture Work Group and the Collaborative Aggregation Partnership with network and application design considerations en route to implementation of a statewide IP-centric network. The Education Council will support strategies that ensure that sufficient bandwidth is being provided to the rural areas of the State so as to provide access to the same educational experiences, regardless of location. The Education Council will emphasize the needs of the rural areas, including IP-centric applications, during NETCOM OSI Layer 1 and 2 deployment

and investigate application development that supports synchronous, asynchronous distance education as well as voice/video/data transfer.

Lead: Volunteer Task Group

Timeframe: July, 2003 - December, 2004

**Expected
Outcomes:**

- The NETCOM project will make available higher bandwidth and/or lower cost Internet 1 service to Educational Service Units, K-12 districts, community colleges, and other education entities.
- Pending the migration from JPEG to H.323 video transfer, the NETCOM project should be able to provide the necessary bandwidth to transfer synchronous video as a data stream and further increase the number of educational opportunities for students and citizens in rural areas.

Community and Economic Development

Encourage and support community information technology development (CC 1)

Description: Support information technology development in Nebraska communities by working with the University of Nebraska and other Technologies Across Nebraska Partners to:
- Provide and/or promote training opportunities on effectively using technology to enhance development opportunities and the delivery of services, especially in the area of IT-related economic development.
- Publish an e-mail newsletter on technology-related development.
- Continue to maintain and update the TAN and Community IT Toolkit Web sites, including adding funding information.
- Work with 8 community or regional technology committees to develop community or regional IT plans through the Community IT Planning and Mini Grant program.
- Provide continuing support for 8 community and regional technology committees that participated in the first year of the IT Planning and Mini Grant pilot program.
- Work with the Nebraska Rural Initiative to explore the expanded use of youth to assist in IT development activities.

Lead: Technologies Across Nebraska and Community Council

Timeframe: June, 2003 — May, 2004

**Expected
Outcomes:**

- Communities in Nebraska will make progress toward becoming Information Age communities.
- Communities will have easy access to information and resources to assist them in developing their capacity to use information technology for community and economic development.

Efficient Delivery of Services

Determine the business case for reinstatement of the Technology Training Grant Fund (EC 2.1)

Description: The Education Council, with the cooperation of the Training Advisory Work Group, will solicit the necessary funding to conduct a statewide needs assessment of K-12 and Higher Education technology training that will help to determine the business case for re-institution of the Technology Training Grant Fund.

Lead: Volunteer Task Group, in cooperation with the Training Advisory Work Group

Timeframe: July, 2003 — June, 2004

**Expected
Outcomes:**

- The Task Group expects to complete a needs assessment and accompanying business case to determine if additional state funding for technology training is necessary.

Support the Nebraska eLearning Initiative (EC 5.1)

Description: The Education Council will assist in the design and development of the Nebraska eLearning Initiative. This effort involves the coordination of multiple education entities to originate and receive a variety of electronic learning opportunities, delivered through terrestrial and satellite methods using synchronous and asynchronous

experiences. This initiative will require outside funding and may address but not be limited to: A) course content development and sharing; B) course management strategies, tools and training; and C) cooperative services and aggregated purchasing possibilities.

Lead: Volunteer Task Group, in cooperation with the Nebraska Department of Education and higher education entities

Timeframe: July, 2003 — December, 2004

**Expected
Outcomes:**

- The Education Council Task Group expects to secure outside grant funding to promote the development of the Nebraska eLearning Initiative.
- The Nebraska eLearning Initiative sponsors expect to complete a first round of pilot and research projects at the K-12 level.

Assist in the development of value-added services for the Nebraska 'Click into Education' Portal (EC 5.2)

Description: The Education Council will help oversee the completion of three enhancements to the Nebraska Education Portal, as prioritized by the Education Council in November, 2002. These enhancements included a Web-based application for college admission, a searchable database of Nebraska higher education course offerings and programs, and a searchable information technology training calendar for formal education entities.

Lead: Volunteer Task Group

Timeframe: July, 2003 — June, 2004

**Expected
Outcomes:**

- The State's contractor for Web services (presently Nebraska Online) will work with the staff of the NITC and the members of the Education Council to complete the Web-based application for college admission, the searchable database of Nebraska higher education course offerings and programs, and the searchable information technology training calendar for formal education entities.

Study and promote effective synchronous and asynchronous instructional methods (EC 6.1)

Description: The Education Council will encourage the development of new instructional methods and resources for synchronous and asynchronous instruction and help establish guidelines for their appropriate use. This task group will also examine the value and cost-effectiveness of synchronous and asynchronous distance learning services using satellite and terrestrial means. This task group will help solicit the necessary funding to conduct a meta-study to determine the confidence and satisfaction that users have in synchronous and asynchronous distance learning delivery systems. In so doing, the effectiveness and efficiencies of the satellite-based distance learning system would be explored.

Lead: Volunteer Task Group

Timeframe: July, 2003 — December, 2003

**Expected
Outcomes:**

- Mini-grant funding will be secured and a meta-study will be completed, indicating the user satisfaction and confidence in the present distance learning delivery systems.
- The task group will complete and examination of the value and cost-effectiveness of synchronous and asynchronous distance learning services using satellite and terrestrial means.

Implement *E-Government Strategic Plan* (SGC 1.1)

Description: In March 2003, the State Government Council adopted a revised *E-Government Strategic Plan for Nebraska State Government*. The plan sets out specific actions and recommendations for this priority. (http://www.nitc.state.ne.us/sgc/documents/egovstrategy_20030313.pdf)

Lead: Office of the CIO

Timeframe: Ongoing

**Expected
Outcomes:**

- (Specific expected outcomes are listed in the *E-Government Strategic Plan for Nebraska State Government*.)

Develop guidelines for electronic records retention (SGC 2.2)

Description: Working with the Records Management Division, the State Government Council will develop guidelines for electronic records retention.

Lead: Electronic Records Retention Work Group

Timeframe: Ongoing

Expected Outcomes:

- Guidelines will be adopted to assist agencies in meeting records retention requirements for electronic records.

Recommend technical standards, guidelines, and enterprise solutions (TP 2.1, SGC 2.1)

Description: The Technical Panel, with input from the NITC councils and other coordinating entities, will recommend the adoption of technical standards, guidelines, and enterprise solutions.

Lead: Assigned by subject

Timeframe: Ongoing

Expected Outcomes:

- Technical standards, guidelines, and enterprise solutions will be adopted, providing for cost-effective and interoperable technical solutions to meet business needs.

Planning and Accountability

Improve planning process and project management (SGC 3.1)

Description: Continue to improve the information technology planning process for state agencies. The State Government Council will review, and revise as appropriate, the planning documents utilized by agencies, including agency comprehensive information technology plans and agency project proposal forms for budget requests. The review will include recommendations for improving the cost-benefit analysis information provided with project proposals. The State Government Council will continue to provide guidance to agencies on best practices for project management. Areas of focus should include management of IT-related projects; measuring results; preparing project closure reports; and recommendations for a certification process for project managers.

Lead: Office of the CIO

Timeframe: July, 2003 – October, 2003

Expected Outcomes:

- Project planning and management documents will be revised in advance of the next biennial budget process.

Communicate with policymakers (SGC 3.2)

Description: The State Government Council will improve communications with policymakers in both the Legislative and Executive branches. This action will include providing briefings to the chairs of the NITC oversight committees (Appropriations Committee and Transportation and Telecommunications Committee) on issues raised by the State Government Council.

Lead: Office of the CIO

Timeframe: Ongoing

Expected Outcomes:

- Briefings scheduled for policymakers on significant enterprise issues.

Develop and implement security policies (SGC 4.1)

Description: In January 2001, the NITC adopted the security policies developed by the Technical Panel's Security Architecture Work Group. These policies, guidelines, and best practices are intended to provide a framework for a secure computing environment, with a focus on state government. The State Government Council, in coordination with the Technical Panel, will work to implement these policies in state government. Areas to be addressed include training, agency level planning, business continuity planning, and security assessments.

Lead: Office of the CIO (Technical Panel's Security Work Group)

Timeframe: July, 2003 – July, 2004
Security-related issues to be addressed:
- Wireless
- Remote Access
- SPAM
- Directory Services
- Continuity of Operations / Disaster Recovery
- Secure Communications

Expected Outcomes:

- Polices, guidelines, and best practices will be developed and implemented.

Conduct project reviews – statutory (TP 3.1)

Description: Provide a technical review of project proposals as required by statute. Categories of projects that must be reviewed by the panel are budget requests, Government Technology Collaboration Fund grant applications, Community Technology Fund grant applications, and projects funded from the Information Technology Infrastructure Fund (ITIF). Certain long-term projects, such as NIS and NETCOM, are also reviewed periodically during the project implementation.

Lead: Government Information Technology Manager

Timeframe: Budget requests: Annual

GTCF and CTF grants: As received
ITIF funded projects: Prior to authorization of use of funds
Long-term projects: Ongoing
Education Innovation Fund Grants: Annual

**Expected
Outcomes:**

- All technical reviews required by statute will be conducted by the Technical Panel.

Conduct project reviews – Other (TP 3.2)

Description: The panel will review projects not listed in 3.1 above at the request of the NITC, the project sponsor, or other responsible party.

Lead: Government Information Technology Manager

Timeframe: State Records Board grants: Quarterly
Voluntary reviews: As requested

**Expected
Outcomes:**

- As requested, the Technical Panel will conduct technical reviews of projects.

Revise procedures for reviewing IT projects and purchases by state agencies (TP 3.3)

Description: The panel will recommend revisions to the technical review procedures for IT related projects and purchases by state agencies. The purpose of the review process is to ensure compliance with technical standards, compatibility with existing or planned infrastructure, and sound decisions. The revised review process will be designed with the following considerations: 1) the process will incorporate all existing review procedures (e.g. the DAS 1909 form) to provide agencies with a one-step process; 2) the process for submitting requests will not be cumbersome; and 3) the review process will allow for a rapid response to the requesting agency.

Lead: Department of Administrative Services Information Technology Sub-cabinet

Timeframe: July, 2003

**Expected
Outcomes:**

- An improved review process will be adopted for state government agency IT purchases and projects.
- The review process will ensure agency compliance with technical standards and compatibility with existing or planned infrastructure.

Section 4

Effectiveness Measures

Section 4
Effectiveness Measures

Overview

The overall purpose of the NITC is to set strategic direction in the area of information technology.   To succeed in its mission, the NITC must track its progress and evaluate its effectiveness.

Below is a summary of progress on NITC goals. A more complete review is included in the "2002 Progress Report to the Governor and Legislature" available at http://www.nitc.state.ne.us/docs/2002report/report.pdf .

Telecommunications Infrastructure

- **NETCOM.** The NITC served as a catalyst by providing encouragement, funding, and facilitation at critical junctures of the Telecommunications Infrastructure Needs Assessment Study (1999/2000). In 2002, the University of Nebraska and the State's Division of Communications combined their bandwidth requirements into a single RFP for data services from Grand Island to Scottsbluff. Building on that success, members of the NITC formed the Collaborative Aggregation Partnership (CAP) to spur deployment of shared telecommunications services statewide.   CAP issued a Request For Proposal (RFP) for "convergent transport backbone network services" connecting Kearney, Grand Island Omaha and Lincoln on March 24, 2003. Contract award is scheduled for June 16, 2003. CAP is planning a second RFP, which would extent the backbone westward and to northeast Nebraska.   Plans for a set of secondary aggregation points are also under considered.

- **Nebraska Network Feasibility Study.** In September 2002, the NITC adopted "The Final Report and Recommendations of the Nebraska Network Work Group." Key recommendations include: 1) Promote statewide purchasing and bandwidth aggregation of telecommunications services; 2) Implement a telecommunications backbone (core routing network);   3) Implement an IP-centric intranet to improve K-20 collaboration and to serve other participants; 4) Determine the best option for providing interconnection of synchronous video networks; and 5) Decide a long-term strategy for network management and support services. The final report is available at (http://www.nitc.state.ne.us/nitc/network/Documents/FinalReportRecommendations_September16.pdf).

- **Network Policy Work Group.** The Community Council, Education Council, and State Government Council have agreed to form a joint Network Policy Work Group to develop recommendations pertaining to the management and operation of shared networks, including providing input to the Collaborative Aggregation Partnership (CAP).   An initial meeting of the Network Policy Work Group is planned for mid-July.

- **Statewide Network Customer Information Manual.** A "Customer Information Manual" with a catalog of network services, service agreements, contract information and pricing is in progress.

- **Statewide Synchronous Video Network Work Group.** The first meeting of the Statewide Synchronous Video Network Work Group was March 26, 2003. A second meeting was held on May 28, 2003. The goal is to revisit standards and prepare an implementation strategy for achieving interoperability and interconnections of existing video networks. More information is available at http://www.nitc.state.ne.us/tp/workgroups/video/index.html.

- **Nebraska Telehealth Network.** With support from the NITC, a committee formed by the Nebraska Hospital Association is developing a plan for a statewide Nebraska Telehealth Network. The plan is being prepared in order to qualify for Nebraska Universal Service Funds. CAP is working closely with the consultants regarding potential use of NETCOM for the backbone.

Community and Economic Development

- **Community IT Toolkit.** In partnership with Technologies Across Nebraska, the Community Council of the NITC has developed the most comprehensive collection of technology related-development available on the Web.   The *Community IT Toolkit* contains resource lists, FAQs, and success stories. The *Community IT Planning and Assessment Workbook*, the newest addition to the toolkit, simplifies the IT planning process.   A recent survey of community technology committees found that seventy-seven percent of those who had visited the *Community IT Toolkit* rated it as moderately or extremely useful.

- **IT Planning and Mini Grant Program.** Eight community and regional IT committees, with support from the NITC Community Council and Technologies Across Nebraska, have conducted technology assessments and are preparing technology plans. The program has focused the efforts of the participating technology committees.   All eight communities should have their plans completed by August, 2003.

Efficient Delivery of Services

- **eGovernment Strategy.** The State Government Council has prepared and updated the state's eGovernment Strategy.

- **Portal Development.**   With funding from the State Records Board, three portals have been developed:
    - the Business Portal (www.nebraska.gov/business/)
    - the Citizen Portal (www.nebraska.gov/citizen/), and the
    - and the Education Portal (www.nebraska.gov/education/).
  The State Government Council has also coordinated the development of the Employee Portal (www.nebraska.gov/employee).

- **Licensing Applications.** The State Government Council is using State Records Board grant funds for developing interactive licensing applications and centralized electronic payment processes.

- **Records Retention Policies.** A work group of the State Government Council is meeting on ways to implement records retention policies for electronic information.

- **ELearning.** A task group of the Education Council is working on the development of an eLearning initiative that will coordinate the delivery of synchronous and asynchronous distance learning experiences and develop course content, course design, and cooperative purchasing opportunities for K-20 entities.

Planning and Accountability

- **Information Technology Planning.** The Statewide Technology Plan focused attention on the need to improve planning for information technology. This is reflected in agency technology comprehensive plans, project proposal forms, and budget forms for information technology.

- **Budget Reviews and Prioritization.** The review and prioritization process in 2000 and 2002 was thorough, structured, and produced an integrated and numeric ranking of budget requests for information technology. Both the Budget Division and Legislative Fiscal Office used the NITC reviews and priorities as a point of departure for their own analyses. Efforts are underway to improve the process for the next biennial budget review.

- **Project Management.** The Statewide Technology Plan endorsed the Project Management Institute's Project Management Body of Knowledge (PMBOK). The first implementation was a requirement for selected projects to submit quarterly

project status reports, using a standard format. Seven agencies reported on a total of 16 projects during the last fiscal year, representing 100% compliance. That number will increase to at least 18 projects in FY 2002. Copies of the project status reports are available on a password-protected Web site (http://www.nitc.state.ne.us/itpm/.)

- **Technical Architecture.** The Technical Panel has begun the task of developing standards and guidelines for the State's technical architecture. Security policies, accessibility guidelines, and video standards are the furthest along. Other standards are in various stages of development. It is too early to assess what impact these standards and guidelines will have. As a first step in evaluating their effect, the revised instructions for the agency comprehensive information technology plans will request information specific to security, disaster recovery, and accessibility.

- **Security Initiatives.** Several activities are underway which address security issues:
  o Phase I (discovery) of the Security Assessment of the State's Network is finished. The tools used for discovery identified a number of "unneeded" services that add some element of risk, such as denial of service. Phase II (vulnerability scan) is underway, with preliminary results ready for five agencies. Phase III (test) will start in June.
  o Security Awareness Training is available. Agencies are still evaluating whether they want to participate in buying into an enterprise license for a Web-based user-training module.
  o The Security Work Group has almost finished standards for remote access and wireless networks. SPAM and secure e-mail are next on the list.
  o A work group of the State Government Council is providing advice on configuration and implementation of a directory services system. This will provide robust management of authentication and authorization, including single sign-on.

- **Video Standards.** The Technical Panel, with assistance from the Education Council, is implementing video standards and developing a migration plan for existing distance learning facilities.

- **NEBSAT Course Cancellation Fees.** The Education Council has developed a policy on course cancellation fees for the NEBSAT system.

Grant Programs

The NITC also has responsibility for awarding grants from the Community Technology Fund and the Government Technology Collaboration Fund. Since its inception, NITC has awarded a total of $675,630 in Community Technology Funds and $639,975 in Government Technology Collaboration Funds. Lists of recipients are available at http://www.nitc.state.ne.us/cc/grants/2001/ctf2001.htm

and http://www.nitc.state.ne.us/sgc/grants/.

Some of the Government Technology Collaboration Fund projects include:
- CCPE project to upgrade their network and develop a statewide postsecondary educational facilities database;
- UNL-Conservation and Survey Division project to digitize historical collection of aerial photographs;
- Foster Care Review Board funding for hardware to allow access to N-Focus and other state systems;
- Volunteer Service Commission hardware upgrade to allow interaction with federal government application.
- Office of the CIO to contract for an external intrusion security assessment for state government.

The Community Technology Fund has funded a variety of technology projects in Nebraska communities.   A sample of Community Technology Fund projects are described below.
- Norfolk Public Library, Columbus Public Library, and Northeast Community College Library/Resource Center formed a consortium (ONE Library) to jointly purchase and share a library automation system.   The consortium saved thousands of dollars over the cost of purchasing separate systems. Member libraries will also save about $7,000 per year in service maintenance.
- The City of Aurora has developed a technology business incubator which offers broadband Internet access, a technology training center, and conference room as well as office space.
- Lower Platte North NRD has facilitated inter-agency collaboration and multipurpose use of water data by developing a standardized database of surface water features.
- Southeast Community College has developed twelve radiologic technology courses and five surgical technology courses for online use to address the shortage of medical technicians in rural Nebraska.
- The Beatrice Public Library has partnered with the Blue Rivers Area Agency on Aging to provide instruction to senior citizens on the use of the Internet.   In the first year, peer volunteers trained nearly 100 users.
- The Village of Brainard has developed a community technology center, offering a variety of technology classes. Community members volunteered 440 hours at the community technology center in the first six months.
- The Kimball County Hospital Clinic has implemented an electronic medical record system to improve patient care and increase efficiency.   Transcription costs have been drastically reduced and patients report reduced wait times.

Progress Report of 2002 Action Items

Summary

One measure of effectiveness is whether the NITC has completed the tasks it set for itself in the preceding Statewide Technology Plan. A simple scorecard is below, followed by a more detailed presentation of the status of each action item that was included in the 2002 Statewide Technology Plan.

2002 Action Items	Status as of June 2003
Telecommunications Infrastructure	
Provide technical support to the NETCOM project (TP 1.1)	Progress made. Continued for 2003.
Provide technical support for aggregation and coordination of networks (TP 2.2)	Progress made. Continued for 2003.
Define statewide video requirements (EC 1.1)	Progress made. Continued for 2003.
Address adequate rural bandwidth (EC 1.2)	Progress made through NETCOM. Continued for 2003.
Implement critical elements of the technical architecture (TP 2.3)	No direct action taken. Indirect actions include adoption of technical standards and guidelines. Discontinued for 2003.
Conduct the Nebraska Telecommunications Infrastructure Security Review (TP 1.2)	No action taken. Discontinued for 2003.
Identify Types and Levels of Service (TP 1.3)	No action taken. Discontinued for 2003.
Community and Economic Development	
Support information technology development (CC 1)	Nearly complete. 2003 action item will further efforts.
Develop a telehealth vision and strategy (CC 2)	Completed. 2003 action item will further efforts.
Efficient Delivery of Services	
Implement E-Government to Business Initiative (SGC 1.1)	Progress made. Continued for 2003 as part of implementing *E-Government Strategic Plan*.
Implement E-Government to Employee Initiative (SGC 1.2)	Completed. Employee Portal created.
Implement E-Government to Citizen Initiative (SGC 1.3)	Completed. Citizen Portal created.
Develop guidelines for records retention (SGC 4.2)	Progress made. Continued for 2003.
Recommend technical standards, guidelines and best practices (TP 2.1)	Progress made. Continued for 2003.
Recommend change in funding for Technology Training Grants (EC 2.1)	Progress made. Continued for 2003.
Recommend technical standards, guidelines and enterprise solutions (SGC 2.1)	Progress made. Continued for 2003
Develop life cycle funding strategies and Total Cost of Ownership materials (EC 3.1)	Completed.
Determine role of technology in standards (EC 4.1)	No action taken. Discontinued for 2003.
Determine educational technology proficiency measures for students, teachers, and administrators (EC 4.2)	Discontinued for 2003.

Encourage the development of synchronous and asynchronous instructional methods (EC 6.1)	Initial progress made. Continued for 2003.
Develop local government toolkit resources (CC2)	No action taken.
Planning and Accountability	
Improve planning process (SGC 3.1)	Not scheduled to begin until 2003. Continued for 2003.
Improve project management (SGC 3.2)	Not scheduled to begin until 2003. Continued for 2003.
Communicate with policymakers (SGC 3.3)	Ongoing. Continued for 2003.
Develop and implement security policies (SGC 4.1)	Progress made. Continued for 2003.
Conduct project reviews – statutory (TP 3.1)	Completed. Continued for 2003.
Conduct project reviews – other (TP 3.2)	Completed. Continued for 2003.
Revise procedures for reviewing IT projects and purchases by state agencies (TP 3.3)	No action taken. Continued for 2003

Action Item Progress Reports

Telecommunications Infrastructure

Provide technical support to the NETCOM project (TP 1.1)

Description   The Technical Panel will provide technical support for the implementation of the NETCOM project; and, support for the Nebraska Network feasibility study, and any subsequent implementation resulting from the study.

Status   The Collaborative Aggregation Partnership (CAP) is in the process of evaluating responses to the Backbone Services RFP SCA-0262 for Phase One of the Statewide Network and will announce the successful bidder on before June 16, 2003.

This action item has been continued for 2003-04. Additional technical assistance will be provided to the NETCOM project through the Technical Panel's Network Architecture Work Group.

Outcomes   The Technical Panel, through the efforts of CAP, has provided input on the timeline, phases, and RFP process for the implementation of Backbone Services.

Provide technical support for aggregation and coordination of networks (TP 2.2)

Description   The Technical Panel will provide technical support for the aggregation and coordination of networks, including the Nebraska Network Work Group. The panel will also create an application implementation work group to further this action item.

Status   The Technical Panel has provided input to the NETCOM project for backbone network services and the Telehealth Subcommittee of the Community Council for telehealth network; and created the Statewide Synchronous Video Work Group (SSVWG) for video networks.

This action item has been continued for 2003-04.

Outcomes   The RFP for the initial phase of the NETCOM project for backbone network services was issued and is under review. Initial work on Phase II of the NETCOM project is underway. The SSVWG has been formed and is meeting.

Define statewide video requirements (EC 1.1)

Description   The Education Council will assist the Technical Panel's Statewide Synchronous Video Work Group (SSVWG) with defining requirements for interconnecting all synchronous video networks.

Status   The SSVWG met on March 26, 2003 and May 28, 2003 and gave a breakout session at the NDLA Conference on May 29, 2003. The work group's Web site is http://www.nitc.state.ne.us/tp/workgroups/video/index.html . This action item will be continued for 2003-04. The Education Council has assisted in naming members to the SSVWG and providing a conduit for information exchange between the SSVWG and the respective K-12 and higher education institutions within Nebraska.

Outcomes   The Statewide Synchronous Video Work Group has already established itself as a credible and trusted work group. It has developed its leadership and established a stable membership. The members have divided themselves into a number of smaller task groups, working on projects that support the overall charge to the work group.

Address adequate rural bandwidth (EC 1.2)

Description   The Education Council will assist with efforts for aggregated purchase of all publicly funded telecommunications and support strategies that ensure sufficient bandwidth for rural areas.

Status   The Collaborative Aggregation Partnership (CAP) is in the process of evaluating responses to the Backbone Services RFP SCA-0262 for Phase One of the Statewide Network and will announce the successful bidder on before June 16, 2003. NITC staff and Education Council members have been involved with the update of the Bandwidth Inventory Database listing all publicly funded telecommunications circuits in the State.

This action item will be continued for 2003-04. The Education Council will also join with the Community and State Government Councils to develop a Network Policy Work Group, which would be charged with developing recommendations on policy issues pertaining to the management and operation of shared networks, including input to the Collaborative Aggregation Partnership.

Outcomes   Education Council members have been directly and indirectly involved with the RFP construction and timeline of events. The additional NETCOM backbone segments addressed in Phase One and Phase Two should greatly assist in the accomplishment of sufficient bandwidth for rural areas.

Implement critical elements of the technical architecture (TP 2.3)

Description   The Technical Panel will identify "critical elements" of the technical architecture and recommend an enterprise approach for implementation of each.

Status   No direct actions were taken on this item. Indirect activities include the adoption of several standards and guidelines relating to security, hardware, and groupware.

This action item has been discontinued for 2003-04.

Outcomes   No direct outcomes on this action item.

Conduct the Nebraska Telecommunications Infrastructure Security Review (TP 1.2)

Description   Working with the state Homeland Security team, the Technical Panel will examine security issues regarding the state's telecommunications infrastructure.

Status   No action taken. This action item has been discontinued for 2003-04. The Security Architecture Work Group continues to meet regularly to address security related issues.

Outcomes   None.

Identify types and levels of service (TP 1.3)

Description   The Technical Panel will identify the levels of telecommunication services that different sectors (including business, health care, and education) require. In cooperation with the Public Service Commission and service providers, the panel will investigate ways to document the availability of different telecommunication services by geographic area.

Status   No action taken. This action item has been discontinued for 2003-04.

Outcomes   None.

Community and Economic Development

Support information technology development through Technologies Across Nebraska (CC 1)

Description   Work with the University of Nebraska and other Technologies Across Nebraska partners to support the implementation of the Technologies Across Nebraska Action Plan including a gap analysis, setting up regional support teams and piloting toolkit materials (http://www.nitc.state.ne.us/toolkit/).

Status   Eight Nebraska communities and regional groups have been awarded grants of $2,500 to develop local information technology plans from the Nebraska Information Technology Commission (NITC) and Technologies Across Nebraska (TAN), a coalition led by University of Nebraska (NU) Cooperative Extension. These community and regional technology committees have pilot tested the *Community*

Information Technology Planning and Assessment Workbook.   In 2003-2004, this program will expand planning grants to eight more communities and regional groups.

Outcomes   Communities in Nebraska are making progress toward becoming Information Age Communities.   Eight community and regional groups have completed local technology assessments and are developing technology plans.

Communities have easy access to information and resources through the Community IT Toolkit and the Technologies Across Nebraska Web sites. New resources available include the *IT Planning and Assessment Workbook* which was favorably evaluated by the technology committees participating in the IT Planning and Mini Grant program.

State agencies, education institutions, and other entities are coordinating and collaborating to leverage available resources. An example of this is the satellite and Web cast workshop on preparing applications for the RUS Community Connect Broadband grant program.   The workshop broadcast in September, 2004 was a joint effort of the University of Nebraska, NET, NITC, and RUS. Congressman Osborne also supported the workshop and was a speaker.

Develop a telehealth vision and strategy (CC 2)

Description   The Telehealth Subcommittee of the Community Council will work with the NITC and other stakeholders to develop a vision and strategy for expanded use of telehealth.

Status   A document outlining the role of the telehealth subcommittee in the development of a telehealth plan and vision has been developed. Members of the Telehealth Subcommittee of the NITC Community Council were actively involved in preparing testimony to the Public Service Commission regarding the use of the Nebraska Universal Service Fund to support telehealth.   In December, the Nebraska Public Service Commission approved the use of the Nebraska Universal Service Fund to support telehealth.   As required by the Public Service Commission, the Nebraska Hospital Association, with assistance from the NITC and the Telehealth Subcommittee, has submitted a plan for the development of a telehealth network on May 30, 2003. Efforts in the following year will focus on supporting the implementation of the plan.

Outcomes   A plan for the development of a statewide Nebraska Telehealth
                      Network has been developed and submitted to the Public Service
                      Commission.

Efficient Delivery of Services

Implement E-Government to Business Initiative (SGC 1.1)

Description   This action item will involve the continued implementation of the
                      Business Portal Action Plan. (A copy is available at:
                      http://www.nitc.state.ne.us/sgc/ and includes a complete list of
                      short and long term action items.)

Status   Progress included maintenance and improvements to the inventory or
                      business forms; completion of five online professional license
                      applications; continued conversion of paper-based forms to on-line
                      forms.

                      This action item has been continued for 2003-04 as part of the
                      implementation of the *E-Government Strategic Plan*.

Outcomes   Improvements made to the business forms inventory. Five
                      professional license renewals provided online. Continued conversion
                      of paper-base forms to on-line forms.

Implement E-Government to Employee Initiative (SGC 1.2)

Description   The State Government Council will develop and implement an action
                      plan to provide an employee portal for state government employees.
                      The portal will provide access to employee related information and
                      services.

Status   Completed.

                      Enhancements to the Employee Portal are included as part of the
                      implementation of the *E-Government Strategic Plan* for 2003-04.

Outcomes   Employee Portal created. (www.nebraska.gov/employee/)

Implement E-Government to Citizen Initiative (SGC 1.3)

Description   Building on the Business Portal, the State Government Council will develop and implement an action plan to provide an enhanced portal for citizens. The portal should provide easier access to existing information and services as well as provide new e-government services.

Status   Completed.

Enhancements to the Citizen Portal are included as part of the implementation of the *E-Government Strategic Plan* for 2003-04.

Outcomes   Citizen Portal created. (www.nebraska.gov/citizen/)

Develop guidelines for records retention (SGC 4.2)

Description   Working with the Records Management Division, the State Government Council will develop technical solutions for records retention.

Status   Progress made. A work group was created to address this issue. The work group created draft best practices for Lotus Notes e-mail retention.

This action item has been continued for 2003-04.

Outcomes   Draft best practices for Lotus Notes e-mail retention are under review.

Recommend technical standards, guidelines, and best practices (TP 2.1)

Description   The Technical Panel, with input from the NITC councils and other coordinating entities, will recommend the adoption of technical standards, guidelines, and best practices.

Status   Progress made. Standards and guidelines were adopted in the following areas: Security, Hardware, and Groupware. This action item has been continued for 2003-04.

Outcomes   The following standards and guidelines were adopted:
- Incident Response and Reporting (Security)
- Disaster Planning (Security)
- Minimum Workstation Configuration Guidelines (Hardware)

- Minimum Workstation Configuration Guidelines for K-12 Public Education (Hardware)
- Secure E-mail for State Government Agencies (Groupware)
- Computer-based Fax Services for State Government Agencies (Groupware) (currently being redrafted)

Recommend change in funding for Technology Training Grants (EC 2.1)

Description   The Education Council will recommend a change in funding of the Technology Training Grants from the current Legislative level of $130,000 to a new funding level of $250,000 for Fiscal Year 2005-06, raising the grant maximum to $25,000 and placing the grant fund under the scope of the NITC with Education Council input. The Training Advisory Work Group will assist in documenting the existing technology training efforts occurring in K-12 and higher education and anticipate future technology training needs for teachers and administrators.

Status   The EC 2.1 Action Item task group has authored the draft language to create the Education Technology Fund that would be managed under the auspices of the NITC. They have also recommended a statewide needs assessment of technology training at the K-12 and higher education level. They are prepared to write a grant to execute this assessment, in conjunction with the Training Advisory Work Group. This action item has been revised for 2003 to include acquisition of funding and execution of a statewide needs assessment of technology training.

Outcomes   The Education Council determined that any request for reinstatement of funding for this grant program would have   to be coupled with a solid business case. Therefore, members are eager to pursue a mini-grant to perform a needs assessment to determine if additional technology training is warranted through such a grant program.

Recommend technical standards guidelines, and enterprise solutions (SGC 2.1)

Description   The State Government Council will recommend technical standards, guidelines, and enterprise solutions for state government. The State Government Council will work with the Technical Panel to develop these standards and guidelines.

Status   Progress made. Five of the identified items were completed or progress was made on the item (Secure E-mail Standard; E-fax;

Content Management; Document Management and Records Retention; and Electronic Forms Automation). For two of the identified items, no action was taken (Revised E-mail Standard and Server Farm).

This action item was revised and has been continued for 2003-04.

Outcomes   Technical standards or guidelines were adopted, or are under review, for the following areas:
- Secure E-mail for State Government Agencies
- Computer-based Fax Services for State Government Agencies
- Best Practices for Lotus Notes E-mail Retention

Develop life cycle funding strategies and Total Cost of Ownership materials (EC 3.1)

Description   The Education Council will assist K-12 and higher education institutions and funding agencies with specific life cycle funding strategies and provide them with Total Cost of Ownership materials in order to achieve the desired level of service.

Status   The task group has completed an update of an Ed Tech 2010 issues paper on life cycle funding. The paper will undergo one more round of editing and then can be sent to every K-12 and Higher Ed administrator involved with technology investments and purchasing. This action item is complete and has been removed as an action item for 2003-04.

Outcomes   The issues paper on Total Cost of Ownership should help increase the level of knowledge and sophistication among administrators when it comes to managing information technology investments. Other valuable Web-based resources have emerged recently on the same topic.

Explore role of technology in education standards (EC 4.1)

Description   The Education Council will explore the appropriate role for technology, essential learnings, competencies, and proficiencies in statewide academic standards, certification and re-certification.

Status   The EC 4.1 task group has not met nor submitted any progress or worksheets to date. The State Board of Education has not entertained any motion to re-emphasize technology standards among the Academic Standards or as a requirement for certification or

recertification. A related issue has developed in the State with regard to the recertification of full-time technology coordinators who have had limited direct student contact in the previous six years. This action item has been discontinued for 2003-04. The Education Council will continue to monitor progress on this topic through an informal network of professional association.

Outcomes   Other than the increased focus on this topic through the naming of Action Item EC 4.1, there was no definitive progress or outcome associated with the establishing the role of technology in education standards.

Determine educational technology proficiency measures for students, teachers, and administrators (EC 4.2)

Description   The Education Council will encourage the implementation of technology proficiency measures for students, teachers, and administrators across the State of Nebraska.

Status   The EC 4.2 task group had met and completed a worksheet that named several other initiatives within the State currently working on this issue. The Nebraska Department of Education had been conducting meetings to work on eighth grade technology proficiencies although the effort is currently on hold. The Leadership Talks Technology Academy (LTTA) for school administrators does embrace the ISTE Technology Standards for administrators and will affect approximately 80% of Nebraska's active administrators. Also, there are efforts underway to determine a Rubric of Essential Technology Conditions for the PreK-12 schools. The rubric addresses technology proficiencies for students, teachers, and administrators. This action item has been discontinued for 2003-04. The Education Council will continue to monitor progress on this topic through an informal network of professional association.

Outcomes   The Education Council members determined that progress was being made on this topic by groups outside of the NITC-affiliated councils, work groups and task groups.

Encourage the development of synchronous and asynchronous instructional methods (EC 6.1)

Description   The Education Council will encourage the development of new instructional methods and resources for synchronous and asynchronous instruction and help establish guidelines for their appropriate use. This work group may also examine the benefits and

cost-effectiveness of synchronous distance learning over the satellite network.

Status   The EC 6.1 task group has met electronically and has completed their worksheet. The task group proposes development and delivery of Web-based courses to the K-12 audience using Asynchronous Learning Network pedagogical models. The task group also proposes a meta-study to determine the confidence and satisfaction that users have in synchronous and asynchronous distance learning delivery systems. In so doing, the effectiveness and efficiencies of the satellite-based distance learning system would be explored. This action item has been updated to include these additional tasks. The Education Council will seek the necessary funding to perform the meta-study or direct survey approach during 2003-04.

Outcomes   Education Council members are widely involved in synchronous and asynchronous distance delivery in Nebraska and are dedicated to solid pedagogical approaches to instruction and learning. They understand that some delivery mechanisms are more efficient than others but that some mechanisms persist because they are legacy systems. The meta-study would help examine the pros and cons of such systems and evaluate their efficiency and satisfaction among users.

Develop local government toolkit resources (CC 3)

Description   The Community Council will identify and develop toolkit resources for local governments, including sample IT plans, sample inter-local agreements, best practices, and case studies.

Status   No action has been taken.   The limited resources of the NITC and the Community Council were allocated to furthering the higher priority areas of community and economic development and telehealth.

Outcomes   Although no action has been taken by the Community Council, the need for training and information on using technology to deliver local government services has been partially addressed by the University of Nebraska Extension's newly developed e-government training program.

Planning and Accountability

Provide a planning and implementation process for IT projects which avoids unnecessary delay and bureaucracy (SGC 3.1)

Description   The State Government Council will continue to improve the information technology planning process for state agencies. The council will review, and revise as appropriate, the planning documents utilized by agencies, including: agency comprehensive information technology plans and agency project proposal forms for budget requests. The review will include recommendations for improving the cost-benefit analysis information provided with project proposals.

Status   This item was not scheduled to begin until June 2003. This action item was combined with SCG 3.2 and has been continued for 2003-04.

Outcomes   No action scheduled until June 2003.

Improve project management (SGC 3.2)

Description   The State Government Council will continue to provide guidance to agencies on best practices for project management. Areas of focus should include management of IT related projects; measuring results; preparing project closure reports; and recommendations for a certification process for project managers.

Status   This item was not scheduled to begin until June 2003. This action item was combined with SCG 3.1 and has been continued for 2003-04.

Outcomes   No action scheduled until June 2003.

Communicate with policymakers (SGC 3.3)

Description   The State Government Council will improve communications with policymakers in both the Legislative and Executive branches. This action will include providing briefings to the chairs of the NITC oversight committees (Appropriations Committee and Transportation and Telecommunications Committee) on issues raised by the State Government Council.

Status   Ongoing. This action item has been continued for 2003-04

Outcomes   None.

Develop and implement security policies (SGC 4.1)

Description   The State Government Council, in coordination with the Technical Panel, will work to implement the NITC security policies in state government. Areas to be addressed include training; agency level planning; business continuity planning; and security assessments.

Status   Progress made. The Security Architecture Work Group meets regularly. This action item was revised and has been continued for 2003-04.

Outcomes   The following standards and guidelines were adopted:
- Incident Response and Reporting
- Disaster Planning
- Secure E-mail for State Government Agencies

Conduct project reviews – statutory (TP 3.1)

Description   The Technical Panel will provide a technical review of project proposals as required by statute. Categories of projects that must be reviewed by the panel are budget requests; Government Technology Collaboration Fund grant applications; Community Technology Fund grant applications; and projects funded from the Information Technology Infrastructure Fund. Certain long-term projects, such as NIS and NETCOM, are also reviewed periodically during the project implementation.

Status   Completed. All statutory reviews were performed. This action item has been continued for 2003-04.

Outcomes   All statutory reviews completed. The following statutory technical reviews were performed:
- State agency budget requests (14 projects)
- Information Technology Infrastructure Fund Projects (1 project reviewed - Public Safety Wireless)
- Community Technology Fund Grants (1 project reviewed - Special Project)

Conduct project reviews – other (TP 3.2)

Description   The Technical Panel will review projects not listed in 3.1 above at the request of the NITC, the project sponsor, or other responsible party.

Status   Completed. Reviews performed as requested. This action item has been continued for 2003-04.

Outcomes   The following voluntary technical reviews were performed, or briefings received, by the Technical Panel:
- State Records Board Grant Fund Applications (5 projects reviewed)
- Last Mile Wireless Effort - Wayne State College
- Telehealth Network Plan
- Video-over-IP at ESUs
- Nebraska Directory Services Project

Revise procedures for reviewing IT projects and purchases by state agencies (TP. 3.3)

Description   The Technical Panel will recommend revisions to the technical review procedures for IT-related projects and purchases by state agencies. The purpose of the review process is to ensure compliance with technical standards, compatibility with existing or planned infrastructure, and sound decisions. The revised review process will be designed with the following considerations: 1) the process will incorporate all existing review procedures (e.g. the DAS 1909 form) to provide agencies with a one-step process; 2) the process for submitting requests will not be cumbersome; and 3) the review process will allow for a rapid response to the requesting agency.

Status   No action taken. This action item has been continued for 2003-04.

Outcomes   None.

Nebraska Information Technology Commission
EDUCATION COUNCIL

Membership Renewals/Replacements pending NITC approval for July 1, 2003-June 30, 2005*

HIGHER EDUCATION RENEWALS

Jack Huck alt. Bill Path	Community College System	**Renewal**
Tom Krepel alt. Robin Smith	State College System	**Renewal**
	UN System	Unfilled Vacancy

HIGHER EDUCATION NEW MEMBERS

Chuck Lenosky alt. Jerry Harnisch	Independent Colleges and Universities	**Replacing Dietz 2003-05**
Rob Manzer alt. Thomas O'Neill, Jr.	Independent Colleges and Universities	***Pro tem O'Neill 2003-04**

K-12 EDUCATION RENEWALS

Linda Engel alt. Renee Bose	Public Teachers	**Renewal**
Joe LeDuc alt. Tom Korta	Private/Parochial Teachers	**Renewal**
Ed Rastovski alt. Keith Rohwer	School Administrators	**Renewal**
Al Schneider alt. Wayne Bell	Educational Service Units	**Renewal**

K-12 EDUCATION NEW MEMBER

Michael Pate alt. Linda Richards	Boards of Education	***Pro tem Bartels 2003-04**

RECOGNITION

Keith Bartels	Boards of Education	**Member 1998-2003**
Con Dietz	Independent Colleges and Universities	**Member/Alternate 1999-2003**

Brief Bio for Mr. Chuck Lenosky, Creighton University, representing Independent Colleges and Universities of Nebraska:

Mr. Chuck Lenosky currently serves as Director of Media Services in the Division of Information Technology for Creighton University. He has held various positions in information technology and biomedical communications within Creighton for the past 21 years. With a background in television broadcasting and production, Mr. Lenosky earned his Bachelors Degree in Telecommunications and a Masters Degree in Adult and Continuing Education. He currently serves on the NITC Community Council Telehealth Subcommittee and had served on the Operations Committee of the previous NEB*SAT Coordinating Council. Mr. Lenosky was nominated by Executive Director Thomas O'Neill, Jr. on behalf of the Association of Independent Colleges and Universities of Nebraska.

Brief Bio for Dr. Rob Manzer, Nebraska Wesleyan University, representing Independent Colleges and Universities of Nebraska:

Dr. Rob Manzer currently serves as Dean of the University College of Nebraska Wesleyan University. He previously held the position of Associate Vice President of Academic Affairs at NWU where he has been since June, 2000. Dr. Manzer has a background in political science, with Masters and Doctorate degrees from the University of Chicago. He will now be responsible for the evaluation and assessment of new initiatives as well as the administration and oversight of the new University College. Dr. Manzer has been responsible for the establishment of several new programs and grants for Nebraska Wesleyan University, some including instruction at a distance. Dr. Manzer was nominated by Executive Director Thomas O'Neill, Jr. on behalf of the Association of Independent Colleges and Universities of Nebraska.

Brief Bio for Mr. Michael Pate, Millard Public Schools School Board, representing Boards of Education:

Mr. Michael Pate currently serves as Vice President of the School Board of Millard Public Schools. He was elected to this position in 1996 and was re-elected in 2000 to his second term. Michael Pate has assisted with several technology initiatives for Millard Public Schools during his tenure as well as the opening of two new high schools. Mr. Pate has a background in banking and attended the University of Nebraska-Omaha as well as the Colorado Graduate School of Banking. He is now Senior Vice President of Nebraska State Bank of Omaha. Mr. Pate was nominated by Executive Director John Bonaiuto on behalf of the Nebraska Association of School Boards.

June 10, 2003

TO: NITC Commissioners

FROM: Rick Becker

SUBJECT: **Survey Options**

OPTION 1: WEB-BASED, UNSCIENTIFIC SURVEY

Option 1 is to develop one or more survey documents which are Web-based and linked to the State Portal (www.Nebraska.gov).

PROS
- Cost. Other than staff time to develop the survey, there would be no cost for this option. Nebrask@ Online would be able to create a Web-based survey, provide links to the State's Portal, and collect the results.
- Flexibility. A single survey instrument could seek general input, or multiple, sector-based surveys could be posted (e.g. a "citizen" survey and a "business" survey). The number of questions would not affect the cost. The type of responses sought is flexible, including open-ended and multiple-choice questions.
- Time. The survey could be posted at anytime, for any length of time desired.

CONS
- Unscientific. The survey would not provide scientifically reliable results. The survey would only reflect the opinions of those who chose to participate. The results could not be assumed to represent the opinions of Internet users in general, nor the public as a whole.

OPTION 2: SCIENTIFIC SURVEY

Staff contacted the Center for Applied Rural Innovation at the University of Nebraska to get a cost estimate for a scientific mail survey using the standard four mailing methodology. This method, which includes sending a preletter, the survey, a reminder postcard, and a follow-up survey, is widely recognized as the best method of ensuring a high rate of response. The cost of conducting a statewide survey with a sample of 4,410 would be $19,237. This would allow for the analysis of regional responses. Costs could be reduced by eliminating the preletter or the follow-up survey. It may also be possible to reduce costs by including the Web address for an online survey and asking recipients to fill the survey out online or to contact the Center for Applied Rural Innovation at the University of Nebraska for a paper copy. The response rate would probably drop by incorporating any of these cost-saving methods.

PROS
- This method will produce the most valid and reliable results.

- Professor John C. Allen, the Director of the Center for Applied Rural Innovation is recognized as an expert in survey methodology. Rebecca Vogt, the Rural Poll Manager, has extensive experience developing and managing surveys.

CONS
- This method is more expensive and time consuming.

OPTION 3: NATIONAL SURVEYS

Several e-government reports exist which include data based on nationwide surveys. These reports include information on how citizens and businesses use e-government, and the types of services users would like to see made available over the Internet. The State Government Council used the results of some of these surveys when developing the *E-Government Strategic Plan for Nebraska State Government*.

The following is a list of some of the reports we currently have:

The New E-Government Equation: Ease, Engagement, Privacy and Protection, Hart-Teeter for the Council for Excellence in Government, http://www.excelgov.org/, April 2003

Horrigan, J., *Counting on the Internet*, Pew Internet & American Life Project, http://www.pewinternet.org/, December 29, 2002

Larsen, E., *The rise of the e-citizen*, Pew Internet & American Life Project, http://www.pewinternet.org/, April 3, 2002

Benchmarking the eGovernment Revolution, Momentum Research Group of Cunningham Communications (Commissioned by NIC), July 26, 2000

PROS
- No cost.
- Scientific results from nationwide survey can be used in conjunction with an unscientific, Web-based survey of Nebraskans.

CONS
- National survey results may, or may not, reflect the interests and needs of our customers.

June 10, 2003

TO: NITC Commissioners

FROM: Rick Becker

SUBJECT: **E-mail Systems in State Government**

The following is a report on e-mail systems used by state government, as requested at the March 2003 NITC meeting.

1. PRE-1997 STANDARD

In 1997, the Information Resource Cabinet ("IRC"), the predecessor of the NITC, formed a team to perform a study of e-mail systems in use by state government and make recommendations for an enterprise-wide electronic mail policy. The study found that over 40 different e-mail systems were in use by state agencies. The e-mail team performed an extensive analysis of the existing environment and possible solutions.

2. ELECTRONIC MAIL STANDARD

On November 18, 1997, the IRC adopted an "Electronic Mail Standard" for state government. (http://www.nitc.state.ne.us/standards/groupware/ems.htm)

Section 1 of the standard sets forth the standardized e-mail systems for state government:

The state will standardize on four e-mail products from which agencies must select in order to take advantage of universal message switching and a central e-mail address directory. These products are:
- Internet Mail Products based on SMTP/MIME and IMAP4
- Lotus Notes/cc:Mail
- Microsoft Exchange
- OfficeVision (OV/VM and OV/400)

3. CURRENT E-MAIL ENVIRONMENT

Attachment A contains summary information on the current e-mail environment taken from the Agency Information Technology Plans submitted in 2002. Attachment B lists the type and number of e-mail accounts by agency.

4. STATE GOVERNMENT COUNCIL - REVIEW OF E-MAIL STANDARD

At their meeting on May 8th, the State Government Council identified 12 topics for further review as possible technical standards, guidelines or enterprise solutions. Revising the Electronic Mail Standard is one of the topics the Council is considering. Interest stems from the phasing out of the OfficeVision product; interest in greater efficiency and economy; and security related issues.

E-mail Accounts

Notes	62947
Exchange	1959
POP3	3926
OfficeVision	1189
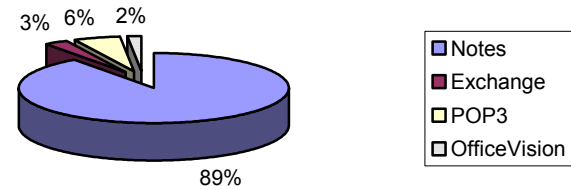
E-mail Accounts (excluding the University of Nebraska)

Notes	10497
Exchange	1359
POP3	2586
OfficeVision	1189

E-mail Accounts

3% 6% 2%

- Notes
- Exchange
- POP3
- OfficeVision

89%

E-mail Accounts (excl. University)

8%

17%

- Notes
- Exchange
- POP3
- OfficeVision

9%

66%
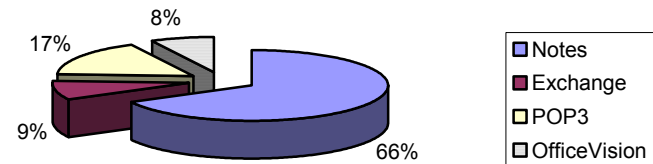
E-mail Applications Used by Agencies (some have multiple)

Notes	31%	16
Exchange	13%	7
POP3	77%	40
OfficeVision	38%	20

E-mail Applications - Percentage of Agencies Using
(Some agencies use multiple applications)
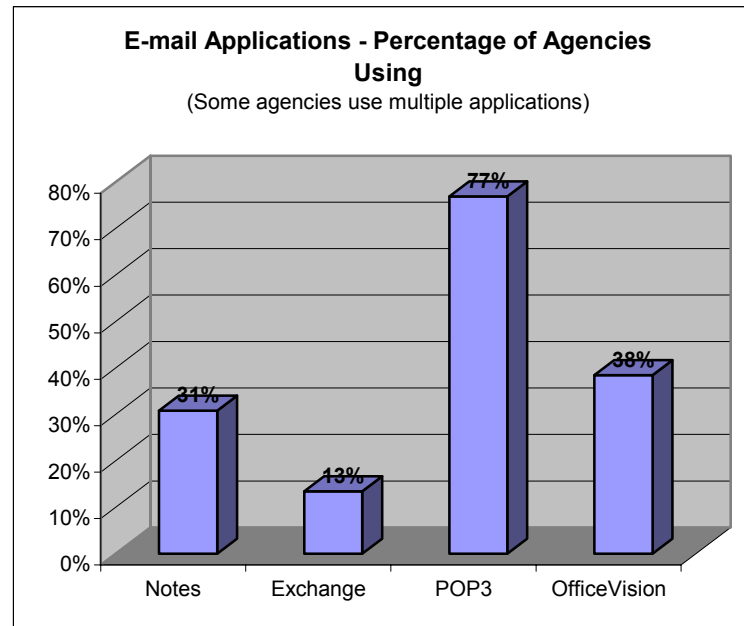
E-mail Accounts by Agency

(Source: 2002 Agency Information Technology Plans)

Agency	Notes	MS Exchange	POP3	OfficeVision
Accountability & Disclosure Comm.			8	
Administrative Services, Dept. of	676	10	59	231
Aeronautics, Dept. of			22	3
Agriculture, Dept. of				
Arts Council			10	
Attorney General				
Auditor of Public Accounts			13	35
Banking, Dept. of			57	4
Barber Examiners			1	
Brand Committee			5	
Community College System				
Coordinating Commission				
Corn Board	8			
Correctional Services, Dept. of	600		38	621
Criminal Justice (Crime Commission)				
Deaf & Hard of Hearing, Comm. for			13	1
Economic Development, Dept. of			85	5
Education, Dept. of	350			25
Vocational Rehabilitation			200	
Assistive Technology Part.			20	
Disability Determinations Section			75	
Educational Telecommunications Comm.	300		30	
Electrical Board			18	2
Engineers and Architects, Board of (and Board of Geologists and Board of Landscape Architects)			5	
Environmental Quality, Dept. of	250		14	
Equal Opportunity Commission				
Ethanol Board				
Fire Marshal			64	5
Game & Parks Commission			250	2
Governor	15			
Energy Office			22	
Policy Research Office			10	
Health & Human Services	5029			50
Industrial Relations, Comm. of			3	
Insurance, Dept. of	90			
Investment Council			7	
Labor, Dept. of		555		21
Legislative Council (from 2000 IT Plan, not included in totals)		285		
Library Commission		60		

Agency	Notes	MS Exchange	POP3	OfficeVision
Lieutenant Governor (See Governor)				
Liquor Control Commission				7
Mexican American Comm.				
Military Department		730	50	
Motor Vehicle, Dept. of	25		82	130
Natural Resources, Dept. of			90	12
Oil & Gas Commission			4	
Parole, Board of (See Correctional Services)				
Power Review Board		3		
Public Accountancy, Board of			4	
Public Advocacy, Comm. on			10	
Public Employee Retirement Bd				
Public Service Comm.				
Racing Commission				
Real Estate Appraiser Board			2	
Real Estate Commission			11	2
Revenue, Dept. of	400			
Roads, Dept. of	2000			
Rural Development Commission			8	
Secretary of State			14	
State College System				
Chadron State College				
Peru State College			1255	
Wayne State College	Yes			
State Patrol	690	1	3	25
Status of Women				
Supreme Court				
Probation	8			
Tax Equalization & Review Comm.			9	3
University of Nebraska System	52450	600	1340	
Veterans' Affairs, Dept. of			12	5
Wheat Board			3	
Workers' Compensation Court	56			
TOTAL	62947	1959	3926	1189
TOTAL (EXCL. UNIVERSITY)	10497	1359	2586	1189